



RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/830,230

Source: Pt/09

Date Processed by STIC: 5/8/2001

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY.

FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-303-212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-303-216.

PATENTIN 2.1 e-mail help: patin21help@uspto.gov or phone 703-306-4119 (R. Wax)

PATENTIN 3.0 e-mail help: patin3help@uspto.gov or phone 703-306-4119 (R. Wax)

**TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER
VERSION 3.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND
TRADEMARK OFFICE WEBSITE. SEE BELOW:**

Checker Version 3.0

The Checker Version 3.0 application is a state-of-the-art Windows based software program employing a logical and intuitive user-interface to check whether a sequence listing is in compliance with format and content rules. Checker Version 3.0 works for sequence listings generated for the original version of 37 CFR §§1.821 - 1.825 effective October 1, 1990 (old rules) and the revised version (new rules) effective July 1, 1998 as well as World Intellectual Property Organization (WIPO) Standard ST.25.

Checker Version 3.0 replaces the previous DOS-based version of Checker, and is Y2K-compliant. Checker allows public users to check sequence listings in Computer Readable form (CRF) before submitting them to the United States Patent and Trademark Office (USPTO). Use of Checker prior to filing the sequence listing is expected to result in fewer errored sequence listings, thus saving time and money.

Checker Version 3.0 can be down loaded from the USPTO website at the following address:

<http://www.uspto.gov/web/offices/pac/checker>

BEST AVAILABLE COPY

PCT

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/830,230

DATE: 05/08/2001
TIME: 12:00:30

Input Set : N:\COPIES\EBONY\PB481USsl.txt
Output Set: N:\CRF3\05082001\I830230.raw

Does Not Comply
Corrected Diskette Needed

2 <110> APPLICANT: Human Genome Sciences, Inc.
4 <120> TITLE OF INVENTION: Lyme Disease Vaccines
6 <130> FILE REFERENCE: PB481US
C--> 8 <140> CURRENT APPLICATION NUMBER: US/09/830,230
9 <141> CURRENT FILING DATE: 2001-04-24
11 <150> PRIOR APPLICATION NUMBER: PCT/US98/12718
12 <151> PRIOR FILING DATE: 1998-06-18
14 <150> PRIOR APPLICATION NUMBER: 60/057,483
15 <151> PRIOR FILING DATE: 1997-09-03
17 <150> PRIOR APPLICATION NUMBER: 60/053,344
18 <151> PRIOR FILING DATE: 1997-07-22
20 <150> PRIOR APPLICATION NUMBER: 60/053,377
21 <151> PRIOR FILING DATE: 1997-07-22
23 <150> PRIOR APPLICATION NUMBER: 60/050,359
24 <151> PRIOR FILING DATE: 1997-06-20
E--> 26 <160> NUMBER OF SEQ ID NOS: 148 755(p.29)
28 <170> SOFTWARE: PatentIn Ver. 2.0

*error
throughout*

ERRORED SEQUENCES

265 <210> SEQ ID NO: 9
266 <211> LENGTH: 1146
267 <212> TYPE: PRT
268 <213> ORGANISM: Homo sapiens
270 <400> SEQUENCE: 9
271 Met Arg Glu Phe Leu Tyr Arg Asn Val Phe Lys Lys Ser Phe Ile Val
272 1 5 10 15
274 Phe Leu Ile Phe Leu Thr Phe Ser Asn Ala Ile Phe Ala Gln Thr Ile
275 20 25 30
277 Asp Asp Glu Asn Ser Lys Lys Arg Asp Lys Leu Thr Leu Ser Gln Lys
278 35 40 45
280 Ser Tyr Leu Arg Glu Leu Glu Leu Ser Thr Asp Glu Asp Leu Lys Lys
281 50 55 60
283 Trp Ala Leu Lys Glu Gly Leu Lys Glu Thr Asp Val Ser Lys Ile Arg
284 65 70 75 80
286 Glu Leu Leu Leu Lys Lys Phe Gly Ile Asp Pro Glu Leu Phe Ile Lys
287 85 90 95
289 Gly Lys Gly Leu Ala Gly Ser Gly Arg Tyr Lys Ile Ile Ile Glu Thr
290 100 105 110
292 Ala Asp Asn Leu Glu Asn Phe Thr Tyr Gly Leu Thr Lys Asp Glu Ser
293 115 120 125
295 Ile Ile Phe Glu Gly Arg Val Asn Ile Leu Val Glu Asp Ile Lys Glu
296 130 135 140
298 Asn Lys Lys His Asn Ile Lys Gly Asp Arg Ile Val Leu Asn Lys Asn
299 145 150 155 160
301 Ser Lys Lys Leu Tyr Ala Ile Gly Asn Val Glu Tyr Ile Leu Asp Met

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302          165          170          175
304 Asp Thr Asn Glu Lys Leu Tyr Phe Tyr Gly Asn Glu Phe Leu Val Asp
305          180          185          190
307 Phe Asp Ser Gln Asn Phe Leu Leu Lys Asn Gly Ile Leu Gln Lys Lys
308          195          200          205
310 Met Gln Lys Asn Gln Ile Asp His Ile Leu Ser Phe Gly Gly Lys Val
311          210          215          220
313 Leu Lys Lys Ile Asp Asn Asp Val Thr Ile Leu Glu Gln Ala Phe Ala
314 225          230          235          240
316 Thr Thr Ser Lys Ile Pro Glu Pro Tyr Tyr Ser Ile Lys Ala Ser Lys
317          245          250          255
319 Ile Trp Ala Leu Pro Ser Gly Asp Phe Gly Phe Leu Asn Ala Ile Phe
320          260          265          270
322 Tyr Met Gly Arg Val Pro Val Phe Tyr Ile Pro Phe Phe Phe Arg Pro
323          275          280          285
325 Gly Asp Ser Leu Phe Phe Asn Pro Ser Leu Gly Leu Asn Pro Arg Lys
326          290          295          300
328 Gly Phe Ser Val Phe Asn Thr Val Tyr Leu Phe Gly Asn Lys Ser Ser
329 305          310          315          320
331 Ser Glu Asp Ser Ser Phe Leu Asp Phe Asp Phe Asn Ser Val Tyr Asn
332          325          330          335
334 Ser Gly Lys Lys Pro Tyr Ile Arg Asn Gly Tyr Leu Thr Tyr Phe Phe
335          340          345          350
337 Ala Glu Asn Leu Ala Pro Ser Val Asn Lys Asp Tyr Val Lys Leu Ile
338          355          360          365
340 Phe Asp Ile Tyr Ala Asn Leu Gly Phe Tyr Ser Gly Ile Asp Phe Asn
341          370          375          380
343 Leu Gly Asn Thr Leu Gly His Phe Lys Thr Leu Glu Gly Asn Phe Gly
344 385          390          395          400
346 Leu Gly Phe Thr Arg Asn Val Tyr Ser Tyr Asp Gly Gly Tyr Tyr Pro
347          405          410          415
349 Phe Asp Asn Arg Thr Leu Lys Gln Ser Leu Phe Ser Phe Ser Asn Leu
350          420          425          430
352 Asn Lys Gly Asp Val Phe Gly Phe Glu Val Pro Phe Arg Tyr Leu Phe
353          435          440          445
355 Lys Phe Lys Thr Glu Phe Leu Leu Ser Asp Ala Leu Phe Ser Val Val
356          450          455          460
358 Leu Glu His Tyr Ser Asp Pro Tyr Val Asn Ile Asp Phe Arg Asp Arg
359 465          470          475          480
361 Ile Glu Ser Ala Thr Phe Phe Ser Leu Leu Asn Leu Asp Lys Asp Ser
362          485          490          495
364 Val Lys Glu Gln Thr Ser Ile Ser Thr Phe Asp Trp Asn Leu Ser Ser
365          500          505          510
367 Phe Tyr Lys Arg Thr Phe Asn Asp Gly Ser Ile Leu Asp Tyr Lys Leu
368          515          520          525
370 Asn Asn Leu Gly Leu Ser Phe Lys Leu Ser Gly Tyr Glu Asn Leu Tyr
371          530          535          540
373 Val Lys Ser Pro Leu Glu Lys Pro Lys Asp Val Asn Asp Pro Thr Arg
374 545          550          555          560

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RAW SEQUENCE LISTING

DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:30

Input Set : N:\COPIES\EBONY\PB481USs1.txt

Output Set: N:\CRF3\05082001\I830230.raw

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376 Lys Trp Phe Tyr Leu Glu Arg Ile Tyr Ala Pro Tyr Ile Asp Leu Asn
377          565          570          575
379 Phe Gln Lys Asp Leu Tyr Asn Asn Gln Trp Thr Phe Pro Ala Asp Thr
380          580          585          590
382 Lys Glu Met Ile Met Arg Pro Glu Ile Lys Asn Leu Glu Asp Lys Asp
383          595          600          605
385 Asn Asp Lys Lys Ser Val Lys Glu Lys Asn Thr Lys Lys Thr Thr Glu
386          610          615          620
388 Leu Thr Lys Asp Leu Tyr Ile Pro Pro Glu Pro Ile Thr Leu Lys Asn
389 625          630          635          640
391 Ile Asp Gln Ser Asp Ser Phe Phe Ile Arg Phe Gly Ile Asn Pro Tyr
392          645          650          655
394 Leu Arg Asn Asn Val Phe Phe Asp Asn Tyr Gly Ile Thr Ser Pro Lys
395          660          665          670
397 Asp Phe Asn Tyr Glu Ile Lys Asn Tyr Leu Phe Asp Ile Lys Asn Lys
398          675          680          685
400 Thr Asp Ile Lys Ile His Ala Asp Phe Tyr Asn Arg Leu Ile Thr Phe
401          690          695          700
403 Glu Asn Leu Leu Tyr Leu Asn Thr Ile Glu Tyr Ser Pro Leu Asn Lys
404 705          710          715          720
406 Asp Phe Lys Val Glu Asp Lys Asp Lys Lys Ser Glu His Ser Ile Ile
407          725          730          735
409 Asn Gln Ile Asn Leu Asn Leu Leu Pro Phe Ile Arg Tyr Pro Leu Phe
410          740          745          750
412 Ser Arg Ser Thr Leu Lys Phe Glu Asn Lys Ala Thr Leu Tyr Ser Phe
413          755          760          765
415 Asn Lys Lys Tyr Asp Ser Asp Val Lys Ser Leu Val Asn Lys Asn Ser
416          770          775          780
418 Ser Ile Phe Leu Ser Asp Pro Glu Thr Phe Tyr Gln Ser Leu Thr Ala
419 785          790          795          800
421 Ser Leu Ile Tyr Asp Tyr Asp Tyr Phe Thr Thr Glu Leu Ser Gly Glu
422          805          810          815
424 Leu Lys Asn Ser Phe Glu Asp Ile Lys Ala Ser Ser Glu Leu Lys Leu
425          820          825          830
427 Ser Leu Asp Phe Pro Tyr Leu Leu Gln Glu Ala Gly Ile Gly Ile Lys
428          835          840          845
430 Tyr Tyr Lys Lys Phe Lys Glu Asp Ala Met Lys Asn Ser Gly Ile Ser
431          850          855          860
433 Ala Val Gln Ser Pro Leu Glu Pro Gln Lys Pro Ser Ser Pro Tyr Lys
434 865          870          875          880
436 Asn Leu Glu Met Ser Pro Ala Leu Tyr Tyr Lys Ile Glu Pro Arg Tyr
437          885          890          895
439 Leu Asp Tyr Phe Lys Phe Ser Phe Leu Val Ala Tyr Asp Pro Leu Ile
440          900          905          910
442 Asn Arg Val Ser Glu Leu Ser Phe Lys Leu Asn Val Phe Asp Phe Gln
443          915          920          925
445 Phe Leu Phe Ala Met Lys Asp Asp Phe Glu Tyr Asn Tyr Asp Pro Leu
446          930          935          940
448 Lys Gly Asp Phe Ser Lys Ile Gly Thr Thr Thr Lys Leu Val Pro Tyr

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Input Set : N:\COPIES\EBONY\PB481USs1.txt

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449 945 950 955 960
 451 Ser Leu Asp Ser Ser Tyr Lys Lys Glu Leu Tyr Val Leu Thr Phe Phe
 452 965 970 975
 454 Asp Asn Lys Leu Ser Phe Thr Leu Gly Val Asp Val Gly Trp Lys Ile
 455 980 985 990
 457 Asn Leu Gln Lys Phe Thr Asp Asn Glu Leu Arg Ser Ala Leu Thr Leu
 458 995 1000 1005
 460 Lys Phe Lys Tyr Thr Glu Phe Leu Glu Ile Tyr Phe Ser Thr Leu Ser
 461 1010 1015 1020
 463 Ile Asn Thr Lys Thr Phe Lys Tyr Phe Lys Gly Tyr Met Asp Gln Ile
 E--> 464 025 1030 1035 1040
 466 Gly Leu Glu Pro Val Asn Phe Phe Val Asp Leu Ser Lys Ser Phe Asn
 467 1045 1050 1055
 469 Phe Phe Asn Ser Gln Asp Arg Lys Asp Ser Leu Phe Lys Ile Lys Lys
 470 1060 1065 1070
 472 Phe Ser Ser Gly Phe Lys Phe Asn Phe Tyr Asp Trp Lys Phe Val Gly
 473 1075 1080 1085
 475 Glu Tyr Asn Leu Glu Pro Asp Leu Leu Arg Gly Ser Asp Gly Ile Tyr
 476 1090 1095 1100
 478 Ser Pro Ile Trp Arg Asn Asn Phe Thr Ile Tyr Ile Ser Trp Asn Phe
 E--> 479 105 1110 1115 1120
 481 Phe Ala Pro Ile Lys Ala Ser Phe Glu Asn Asn Lys Asp Thr Asn Tyr
 482 1125 1130 1135
 484 Glu Phe Ile Ile Asn Arg Lys Thr Lys Lys
 485 1140 1145
 487 <210> SEQ ID NO: 10
 488 <211> LENGTH: 1120
 489 <212> TYPE: PRT
 490 <213> ORGANISM: Homo sapiens
 492 <400> SEQUENCE: 10
 493 Ile Phe Ala Gln Thr Ile Asp Asp Glu Asn Ser Lys Lys Arg Asp Lys
 494 1 5 10 15
 496 Leu Thr Leu Ser Gln Lys Ser Tyr Leu Arg Glu Leu Glu Leu Ser Thr
 497 20 25 30
 499 Asp Glu Asp Leu Lys Lys Trp Ala Leu Lys Glu Gly Leu Lys Glu Thr
 500 35 40 45
 502 Asp Val Ser Lys Ile Arg Glu Leu Leu Lys Lys Phe Gly Ile Asp
 503 50 55 60
 505 Pro Glu Leu Phe Ile Lys Gly Lys Gly Leu Ala Gly Ser Gly Arg Tyr
 506 65 70 75 80
 508 Lys Ile Ile Ile Glu Thr Ala Asp Asn Leu Glu Asn Phe Thr Tyr Gly
 509 85 90 95
 511 Leu Thr Lys Asp Glu Ser Ile Ile Phe Glu Gly Arg Val Asn Ile Leu
 512 100 105 110
 514 Val Glu Asp Ile Lys Glu Asn Lys Lys His Asn Ile Lys Gly Asp Arg
 515 115 120 125
 517 Ile Val Leu Asn Lys Asn Ser Lys Lys Leu Tyr Ala Ile Gly Asn Val
 518 130 135 140
 520 Glu Tyr Ile Leu Asp Met Asp Thr Asn Glu Lys Leu Tyr Phe Tyr Gly

When numbering
 the first amino
 acid on a line,
 begin number directly
 under first letter
 of amino acid

P.7

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TIME: 12:00:30

Input Set : N:\COPIES\EBONY\PB481USs1.txt

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```

521 145          150          155          160
523 Asn Glu Phe Leu Val Asp Phe Asp Ser Gln Asn Phe Leu Leu Lys Asn
524          165          170          175
526 Gly Ile Leu Gln Lys Lys Met Gln Lys Asn Gln Ile Asp His Ile Leu
527          180          185          190
529 Ser Phe Gly Gly Lys Val Leu Lys Lys Ile Asp Asn Asp Val Thr Ile
530          195          200          205
532 Leu Glu Gln Ala Phe Ala Thr Thr Ser Lys Ile Pro Glu Pro Tyr Tyr
533          210          215          220
535 Ser Ile Lys Ala Ser Lys Ile Trp Ala Leu Pro Ser Gly Asp Phe Gly
536 225          230          235          240
538 Phe Leu Asn Ala Ile Phe Tyr Met Gly Arg Val Pro Val Phe Tyr Ile
539          245          250          255
541 Pro Phe Phe Phe Arg Pro Gly Asp Ser Leu Phe Phe Asn Pro Ser Leu
542          260          265          270
544 Gly Leu Asn Pro Arg Lys Gly Phe Ser Val Phe Asn Thr Val Tyr Leu
545          275          280          285
547 Phe Gly Asn Lys Ser Ser Ser Glu Asp Ser Ser Phe Leu Asp Phe Asp
548          290          295          300
550 Phe Asn Ser Val Tyr Asn Ser Gly Lys Lys Pro Tyr Ile Arg Asn Gly
551 305          310          315          320
553 Tyr Leu Thr Tyr Phe Phe Ala Glu Asn Leu Ala Pro Ser Val Asn Lys
554          325          330          335
556 Asp Tyr Val Lys Leu Ile Phe Asp Ile Tyr Ala Asn Leu Gly Phe Tyr
557          340          345          350
559 Ser Gly Ile Asp Phe Asn Leu Gly Asn Thr Leu Gly His Phe Lys Thr
560          355          360          365
562 Leu Glu Gly Asn Phe Gly Leu Gly Phe Thr Arg Asn Val Tyr Ser Tyr
563          370          375          380
565 Asp Gly Gly Tyr Tyr Pro Phe Asp Asn Arg Thr Leu Lys Gln Ser Leu
566 385          390          395          400
568 Phe Ser Phe Ser Asn Leu Asn Lys Gly Asp Val Phe Gly Phe Glu Val
569          405          410          415
571 Pro Phe Arg Tyr Leu Phe Lys Phe Lys Thr Glu Phe Leu Leu Ser Asp
572          420          425          430
574 Ala Leu Phe Ser Val Val Leu Glu His Tyr Ser Asp Pro Tyr Val Asn
575          435          440          445
577 Ile Asp Phe Arg Asp Arg Ile Glu Ser Ala Thr Phe Phe Ser Leu Leu
578          450          455          460
580 Asn Leu Asp Lys Asp Ser Val Lys Glu Gln Thr Ser Ile Ser Thr Phe
581 465          470          475          480
583 Asp Trp Asn Leu Ser Ser Phe Tyr Lys Arg Thr Phe Asn Asp Gly Ser
584          485          490          495
586 Ile Leu Asp Tyr Lys Leu Asn Asn Leu Gly Leu Ser Phe Lys Leu Ser
587          500          505          510
589 Gly Tyr Glu Asn Leu Tyr Val Lys Ser Pro Leu Glu Lys Pro Lys Asp
590          515          520          525
592 Val Asn Asp Pro Thr Arg Lys Trp Phe Tyr Leu Glu Arg Ile Tyr Ala
593          530          535          540

```

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Input Set : N:\COPIES\EBONY\PB481USsl.txt

Output Set: N:\CRF3\05082001\I830230.raw

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595 Pro Tyr Ile Asp Leu Asn Phe Gln Lys Asp Leu Tyr Asn Asn Gln Trp
596 545 550 555 560
598 Thr Phe Pro Ala Asp Thr Lys Glu Met Ile Met Arg Pro Glu Ile Lys
599 565 570 575
601 Asn Leu Glu Asp Lys Asp Asn Asp Lys Lys Ser Val Lys Glu Lys Asn
602 580 585 590
604 Thr Lys Lys Thr Thr Glu Leu Thr Lys Asp Leu Tyr Ile Pro Pro Glu
605 595 600 605
607 Pro Ile Thr Leu Lys Asn Ile Asp Gln Ser Asp Ser Phe Phe Ile Arg
608 610 615 620
610 Phe Gly Ile Asn Pro Tyr Leu Arg Asn Asn Val Phe Phe Asp Asn Tyr
611 625 630 635 640
613 Gly Ile Thr Ser Pro Lys Asp Phe Asn Tyr Glu Ile Lys Asn Tyr Leu
614 645 650 655
616 Phe Asp Ile Lys Asn Lys Thr Asp Ile Lys Ile His Ala Asp Phe Tyr
617 660 665 670
619 Asn Arg Leu Ile Thr Phe Glu Asn Leu Leu Tyr Leu Asn Thr Ile Glu
620 675 680 685
622 Tyr Ser Pro Leu Asn Lys Asp Phe Lys Val Glu Asp Lys Asp Lys Lys
623 690 695 700
625 Ser Glu His Ser Ile Ile Asn Gln Ile Asn Leu Asn Leu Leu Pro Phe
626 705 710 715 720
628 Ile Arg Tyr Pro Leu Phe Ser Arg Ser Thr Leu Lys Phe Glu Asn Lys
629 725 730 735
631 Ala Thr Leu Tyr Ser Phe Asn Lys Lys Tyr Asp Ser Asp Val Lys Ser
632 740 745 750
634 Leu Val Asn Lys Asn Ser Ser Ile Phe Leu Ser Asp Pro Glu Thr Phe
635 755 760 765
637 Tyr Gln Ser Leu Thr Ala Ser Leu Ile Tyr Asp Tyr Asp Tyr Phe Thr
638 770 775 780
640 Thr Glu Leu Ser Gly Glu Leu Lys Asn Ser Phe Glu Asp Ile Lys Ala
641 785 790 795 800
643 Ser Ser Glu Leu Lys Leu Ser Leu Asp Phe Pro Tyr Leu Leu Gln Glu
644 805 810 815
646 Ala Gly Ile Gly Ile Lys Tyr Tyr Lys Lys Phe Lys Glu Asp Ala Met
647 820 825 830
649 Lys Asn Ser Gly Ile Ser Ala Val Gln Ser Pro Leu Glu Pro Gln Lys
650 835 840 845
652 Pro Ser Ser Pro Tyr Lys Asn Leu Glu Met Ser Pro Ala Leu Tyr Tyr
653 850 855 860
655 Lys Ile Glu Pro Arg Tyr Leu Asp Tyr Phe Lys Phe Ser Phe Leu Val
656 865 870 875 880
658 Ala Tyr Asp Pro Leu Ile Asn Arg Val Ser Glu Leu Ser Phe Lys Leu
659 885 890 895
661 Asn Val Phe Asp Phe Gln Phe Leu Phe Ala Met Lys Asp Asp Phe Glu
662 900 905 910
664 Tyr Asn Tyr Asp Pro Leu Lys Gly Asp Phe Ser Lys Ile Gly Thr Thr
665 915 920 925
667 Thr Lys Leu Val Pro Tyr Ser Leu Asp Ser Ser Tyr Lys Lys Glu Leu

```

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TIME: 12:00:30

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Output Set: N:\CRF3\05082001\I830230.raw

```

668      930      935      940
670 Tyr Val Leu Thr Phe Phe Asp Asn Lys Leu Ser Phe Thr Leu Gly Val
671 945      950      955      960
673 Asp Val Gly Trp Lys Ile Asn Leu Gln Lys Phe Thr Asp Asn Glu Leu
674      965      970      975
676 Arg Ser Ala Leu Thr Leu Lys Phe Lys Tyr Thr Glu Phe Leu Glu Ile
677      980      985      990
679 Tyr Phe Ser Thr Leu Ser Ile Asn Thr Lys Thr Phe Lys Tyr Phe Lys
680      995      1000      1005
682 Gly Tyr Met Asp Gln Ile Gly Leu Glu Pro Val Asn Phe Phe Val Asp
683 1010      1015      1020
685 Leu Ser Lys Ser Phe Asn Phe Phe Asn Ser Gln Asp Arg Lys Asp Ser
E--> 686 025      1030      1035      1040
688 Leu Phe Lys Ile Lys Lys Phe Ser Ser Gly Phe Lys Phe Asn Phe Tyr
689      1045      1050      1055
691 Asp Trp Lys Phe Val Gly Glu Tyr Asn Leu Glu Pro Asp Leu Leu Arg
692      1060      1065      1070
694 Gly Ser Asp Gly Ile Tyr Ser Pro Ile Trp Arg Asn Asn Phe Thr Ile
695      1075      1080      1085
697 Tyr Ile Ser Trp Asn Phe Phe Ala Pro Ile Lys Ala Ser Phe Glu Asn
698 1090      1095      1100
700 Asn Lys Asp Thr Asn Tyr Glu Phe Ile Ile Asn Arg Lys Thr Lys Lys
E--> 701 105      1110      1115      1120

```

*same
errors as
p. 4*

```

4883 <210> SEQ ID NO: 103
4884 <211> LENGTH: 185
4885 <212> TYPE: DNA
4886 <213> ORGANISM: Homo sapiens
4888 <220> FEATURE:
W--> 4889 <221> NAME/KEY: misc feature
4890 <222> LOCATION: (3)
4891 <223> OTHER INFORMATION: n equals a,t,g, or c
4893 <220> FEATURE:
W--> 4894 <221> NAME/KEY: misc feature
4895 <222> LOCATION: (19)
4896 <223> OTHER INFORMATION: n equals a,t,g, or c
4898 <220> FEATURE:
W--> 4899 <221> NAME/KEY: misc feature
4900 <222> LOCATION: (28)
4901 <223> OTHER INFORMATION: n equals a,t,g, or c
4903 <220> FEATURE:
W--> 4904 <221> NAME/KEY: misc feature
4905 <222> LOCATION: (32)
4906 <223> OTHER INFORMATION: n equals a,t,g, or c
4908 <220> FEATURE:
W--> 4909 <221> NAME/KEY: misc feature
4910 <222> LOCATION: (46)
4911 <223> OTHER INFORMATION: n equals a,t,g, or c
4913 <220> FEATURE:
W--> 4914 <221> NAME/KEY: misc feature

```

use underscore

misc-feature

pp 7-8

RAW SEQUENCE LISTING

DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:31

Input Set : N:\COPIES\EBONY\PB481USsl.txt

Output Set: N:\CRF3\05082001\I830230.raw

4915 <222> LOCATION: (72)
 4916 <223> OTHER INFORMATION: n equals a,t,g, or c
 4918 <220> FEATURE:
 W--> 4919 <221> NAME/KEY: misc feature
 4920 <222> LOCATION: (79)
 4921 <223> OTHER INFORMATION: n equals a,t,g, or c
 4923 <220> FEATURE:
 W--> 4924 <221> NAME/KEY: misc feature
 4925 <222> LOCATION: (90)
 4926 <223> OTHER INFORMATION: n equals a,t,g, or c
 4928 <220> FEATURE:
 W--> 4929 <221> NAME/KEY: misc feature
 4930 <222> LOCATION: (105)
 4931 <223> OTHER INFORMATION: n equals a,t,g, or c
 4933 <220> FEATURE:
 W--> 4934 <221> NAME/KEY: misc feature
 4935 <222> LOCATION: (118)
 4936 <223> OTHER INFORMATION: n equals a,t,g, or c
 4938 <220> FEATURE:
 W--> 4939 <221> NAME/KEY: misc feature
 4940 <222> LOCATION: (132)
 4941 <223> OTHER INFORMATION: n equals a,t,g, or c
 4943 <220> FEATURE:
 W--> 4944 <221> NAME/KEY: misc feature
 4945 <222> LOCATION: (140)
 4946 <223> OTHER INFORMATION: n equals a,t,g, or c
 4948 <220> FEATURE:
 W--> 4949 <221> NAME/KEY: misc feature
 4950 <222> LOCATION: (145)
 4951 <223> OTHER INFORMATION: n equals a,t,g, or c
 4953 <220> FEATURE:
 W--> 4954 <221> NAME/KEY: misc feature
 4955 <222> LOCATION: (159)
 4956 <223> OTHER INFORMATION: n equals a,t,g, or c
 4958 <220> FEATURE:
 W--> 4959 <221> NAME/KEY: misc feature
 4960 <222> LOCATION: (183)
 4961 <223> OTHER INFORMATION: n equals a,t,g, or c
 4963 <400> SEQUENCE: 103
 E--> 4964 kinasskfyy aegwyvifhs qmkkkpenyk kniffllqkal kypfgrnkyys ltkietkegw 60
 E--> 4965 ekykllfkmh vnlllvrgnl nlgdldftrn lyffktpek d gilsnleksk klyklainyy 120
 E--> 4966 sealkyhhkl enyttvklern dgitnwedey hkislkelny ydiikkellr idetkaffeq 180
 E--> 4967 gpnyy 185
 14026 <210> SEQ ID NO: 320
 14027 <211> LENGTH: 1119
 14028 <212> TYPE: PRT
 14029 <213> ORGANISM: Homo sapiens
 14031 <220> FEATURE:
 14032 <221> NAME/KEY: SITE

PP 11-12

(Examples)
 invalid base
 designators
 for use in
 the
 sequence itself.
 (The three
 remaining lines in
 the sequence have
 same error)

RAW SEQUENCE LISTING

DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:33

Input Set : N:\COPIES\EBONY\PB481USsl.txt

Output Set: N:\CRF3\05082001\I830230.raw

14033 <222> LOCATION: (573)
 14034 <223> OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
 14036 <220> FEATURE:
 14037 <221> NAME/KEY: SITE
 14038 <222> LOCATION: (627)
 14039 <223> OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
 14041 <220> FEATURE:
 14042 <221> NAME/KEY: SITE
 14043 <222> LOCATION: (735)
 14044 <223> OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
 14046 <400> SEQUENCE: 320
 14047 Met Asn Lys Lys His Thr Asn Phe Ser Val Leu Leu Leu Leu Ile Phe
 14048 1 5 10 15
 14050 Leu Leu Ile Leu Ser Phe Gly Gly Phe Gly Tyr Tyr Ile Tyr Gln Ser
 14051 20 25 30
 14053 Lys Leu Asn Asp Lys Asn Arg Glu Ile Met Leu Asn Glu Val Lys Asn
 14054 35 40 45
 14056 Ser Val Ile Asp Arg Asn Tyr Lys Lys Ala Tyr Ser Val Ala Lys Leu
 14057 50 55 60
 14059 Leu Gln Asp Lys Tyr Pro Gln Asn Glu Asp Ile Ala Met Leu Thr Asn
 14060 65 70 75 80
 14062 Thr Leu Ala Glu Ile Ala Asn Ser Ser Pro Phe Glu Ser Lys Asp Leu
 14063 85 90 95
 14065 Gln Arg Asp Ser Ala Asn Gln Ile Leu Asp Lys Ile Lys Gly Gln Asp
 14066 100 105 110
 14068 Asn Thr Lys Thr Asn Val Asn Glu Asn Phe Asp Ile Ala Phe Asn Asn
 14069 115 120 125
 14071 Arg Tyr Ile Lys Asp Ser Thr Ile Thr Glu Asn Tyr Ser Asp Arg Asn
 14072 130 135 140
 14074 Asp Asp Val Gly Ile Glu Asp Glu Asp Ile Ser Glu Phe Lys Lys Ser
 14075 145 150 155 160
 14077 Lys Ile Pro Glu Lys Ile Lys Pro Asn Thr Asn Pro Lys Glu Glu Asp
 14078 165 170 175
 14080 Gln Ile Ile Gln Ser Pro Asn Pro Lys Leu Ser Val Asn Asp Gln Lys
 14081 180 185 190
 14083 Asn Leu Phe Asn Leu Glu Lys Leu Lys Lys Asn Leu Ser Gly Lys Ser
 14084 195 200 205
 14086 Asn Ser Glu Asn Ile Leu Asn Asp Ser Gln Lys Ile Glu Asn Asp Lys
 14087 210 215 220
 14089 Gln Asn Thr Asn Leu Ser Lys Glu Lys Asn Ser Glu Asn Ile Leu Lys
 14090 225 230 235 240
 14092 Thr Pro Asp Asn Ser Lys Tyr Ser Asn Asn Asn Asn Thr Thr Ser Leu
 14093 245 250 255
 14095 Lys Lys Ile Ser Ser Asn Ser Gln Lys Glu Ser Glu Leu Ser Pro Pro
 14096 260 265 270
 14098 Ser Gln Thr Ile Ile Gly Lys Ile Tyr Arg Pro Tyr Ser Tyr Leu Ile
 14099 275 280 285
 14101 Lys Lys Glu Leu Tyr Glu Ile Leu Asp Asp Ile Asn Thr Gly Arg Val
 14102 290 295 300

RAW SEQUENCE LISTING

DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:33

Input Set : N:\COPIES\EBONY\PB481USs1.txt

Output Set: N:\CRF3\05082001\I830230.raw

14104 Thr Leu Gly Lys Asn Arg Leu Lys Glu Leu Ile Lys Lys Gly Leu Ser
 14105 305 310 315 320
 14107 Asn Lys Phe Gln Lys Val Asn Glu Leu Ile Glu Asn Ser Lys Asn Lys
 14108 325 330 335
 14110 Glu Ala Ser Asn Leu Leu Leu Thr Leu Ile Lys Lys Asp Ile Glu Pro
 14111 340 345 350
 14113 Asn Leu Ile Asn Ile Pro Lys Asp Pro Tyr Lys Lys Glu Ile Phe Gln
 14114 355 360 365
 14116 Leu Asp Lys Glu Asp Lys Lys Pro Gln Tyr Leu Glu Asp Leu Lys Ser
 14117 370 375 380
 14119 Lys Val His Ser Ile Lys Pro Ile Asp Leu Glu Asn Thr Lys Ser Arg
 14120 385 390 395 400
 14122 Gln Gln Ala Ile Lys Asp Leu Asn Glu Phe Leu Lys Asn Asn Pro Asn
 14123 405 410 415
 14125 Asp Ala Gln Ala Ser Lys Thr Leu Ala Gln Ala Asn Lys Ile Gln His
 14126 420 425 430
 14128 Leu Glu Asp Leu Lys Ser Lys Val His Ser Ile Lys Pro Ile Asp Leu
 14129 435 440 445
 14131 Glu Asn Thr Lys Ser Arg Gln Gln Ala Ile Lys Asp Leu Asn Glu Phe
 14132 450 455 460
 14134 Leu Lys Asn Asn Pro Asn Asp Ala Gln Ala Ser Lys Thr Leu Ala Gln
 14135 465 470 475 480
 14137 Ala Asn Lys Ile Gln His Leu Glu Asp Leu Lys Ser Lys Val His Ser
 14138 485 490 495
 14140 Ile Lys Pro Ile Asp Leu Glu Asn Thr Lys Ser Arg Gln Gln Ala Ile
 14141 500 505 510
 14143 Lys Asp Leu Asn Glu Phe Leu Lys Asn Asn Pro Asn Asp Ala Gln Ala
 14144 515 520 525
 14146 Ser Lys Thr Leu Ala Gln Ala Asn Lys Ile Gln His Leu Glu Asp Leu
 14147 530 535 540
 14149 Lys Ser Lys Val His Ser Ile Lys Pro Ile Asp Leu Glu Asn Thr Lys
 14150 545 550 555 560
 14152 Ser Arg Gln Gln Ala Ile Lys Asp Leu Asn Glu Phe Xaa Lys Asn Asn
 14153 565 570 575
 14155 Pro Asn Asp Ala Gln Ala Ser Lys Thr Leu Ala Gln Ala Asn Lys Ile
 14156 580 585 590
 14158 Gln His Leu Glu Asp Leu Lys Ser Lys Val His Ser Ile Lys Pro Ile
 14159 595 600 605
 14161 Asp Leu Glu Asn Thr Lys Ser Arg Gln Gln Ala Ile Lys Asp Leu Asn
 14162 610 615 620
 14164 Glu Phe Xaa Lys Asn Asn Pro Asn Asp Ala Gln Ala Ser Lys Thr Leu
 14165 625 630 635 640
 14167 Ala Gln Ala Asn Lys Ile Gln His Leu Glu Asp Leu Lys Ser Lys Val
 14168 645 650 655
 14170 His Ser Ile Lys Pro Ile Asp Leu Glu Asn Thr Lys Ser Arg Gln Gln
 14171 660 665 670
 14173 Ala Ile Lys Asp Leu Asn Glu Phe Leu Lys Asn Asn Pro Asn Asp Ala
 14174 675 680 685
 14176 Gln Ala Ser Lys Thr Leu Ala Gln Ala Asn Lys Ile Gln His Leu Glu

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DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:33

Input Set : N:\COPIES\EBONY\PB481USsl.txt

Output Set: N:\CRF3\05082001\I830230.raw

14177 690 695 700
 14179 Asp Leu Lys Ser Lys Val His Ser Ile Lys Pro Ile Asp Leu Glu Asn
 14180 705 710 715 720
 OK 14182 Thr Lys Ser Arg Gln Gln Ala Ile Lys Asp Leu Asn Glu Phe Xaa Lys
 14183 725 730 735
 14185 Asn Asn Pro Asn Asp Ala Gln Ala Ser Lys Thr Leu Ala Gln Ala Tyr
 14186 740 745 750
 14188 Glu Asn Asn Gly Asp Leu Leu Lys Ala Glu Asn Ala Tyr Glu Lys Ile
 14189 755 760 765
 14191 Ile Lys Leu Thr Asn Thr Gln Glu Asp His Tyr Lys Leu Gly Ile Ile
 14192 770 775 780
 14194 Arg Phe Lys Leu Lys Lys Tyr Glu His Ser Ile Glu Ser Phe Asp Gln
 14195 785 790 795 800
 14197 Thr Ile Lys Leu Asp Pro Lys His Lys Lys Ala Leu His Asn Lys Gly
 14198 805 810 815
 14200 Ile Ala Leu Met Met Leu Asn Lys Asn Lys Lys Ala Ile Glu Ser Phe
 14201 820 825 830
 14203 Glu Lys Ala Ile Gln Ile Asp Lys Asn Tyr Gly Thr Ala Tyr Tyr Gln
 14204 835 840 845
 14206 Lys Gly Ile Ala Glu Glu Lys Asn Gly Asp Met Gln Gln Ala Phe Ala
 14207 850 855 860
 14209 Ser Phe Lys Asn Ala Tyr Asn Leu Asp Lys Asn Pro Asn Tyr Ala Leu
 14210 865 870 875 880
 14212 Lys Ala Gly Ile Val Ser Asn Asn Leu Gly Asn Phe Lys Gln Ser Glu
 14213 885 890 895
 14215 Glu Tyr Leu Asn Phe Phe Asn Ala Asn Ala Lys Lys Pro Asn Glu Ile
 14216 900 905 910
 14218 Ala Ile Tyr Asn Leu Ser Ile Ala Lys Phe Glu Asn Asn Lys Leu Glu
 14219 915 920 925
 14221 Glu Ser Leu Glu Thr Ile Asn Lys Ala Ile Asp Leu Asn Pro Glu Lys
 14222 930 935 940
 14224 Ser Glu Tyr Leu Tyr Leu Lys Ala Ser Ile Asn Leu Lys Lys Glu Asn
 14225 945 950 955 960
 14227 Tyr Gln Asn Ala Ile Ser Leu Tyr Ser Leu Val Ile Glu Lys Asn Pro
 14228 965 970 975
 14230 Glu Asn Thr Ser Ala Tyr Ile Asn Leu Ala Lys Ala Tyr Glu Lys Ser
 14231 980 985 990
 14233 Gly Asn Lys Ser Gln Ala Ile Ser Thr Leu Glu Lys Ile Ile Asn Lys
 14234 995 1000 1005
 14236 Asn Asn Lys Leu Ala Leu Asn Asn Leu Gly Ile Leu Tyr Lys Lys Glu
 14237 1010 1015 1020
 14239 Lys Asn Tyr Gln Lys Ala Ile Glu Ile Phe Glu Lys Ala Ile Ile Asn
 E--> 14240 025 / 025 1030 1035 1040
 14242 Ser Asp Ile Glu Ala Lys Tyr Asn Leu Ala Thr Thr Leu Ile Glu Ile
 14243 1045 1050 1055
 14245 Asn Asp Asn Thr Arg Ala Lys Asp Leu Leu Arg Glu Tyr Thr Lys Leu
 14246 1060 1065 1070
 14248 Lys Pro Asn Asn Pro Glu Ala Leu His Ala Leu Gly Ile Ile Glu Tyr
 14249 1075 1080 1085

RAW SEQUENCE LISTING DATE: 05/08/2001
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Input Set : N:\COPIES\EBONY\PB481USsl.txt
 Output Set: N:\CRF3\05082001\I830230.raw

14251 Asn Glu Asn Asn Asn Asp Gln Thr Leu Arg Glu Leu Ile Lys Lys Phe
 14252 1090 1095 1100
 14254 Pro Asn Tyr Lys Lys Asn Glu Asn Ile Lys Lys Ile Ile Gly Ile
 E--> 14255 105 1105 1110 1115
 14257 <210> SEQ ID NO: 321
 14258 <211> LENGTH: 1087
 14259 <212> TYPE: PRT
 14260 <213> ORGANISM: Homo sapiens
 14262 <220> FEATURE:
 14263 <221> NAME/KEY: SITE
 14264 <222> LOCATION: (541)
 14265 <223> OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
 14267 <220> FEATURE:
 14268 <221> NAME/KEY: SITE
 14269 <222> LOCATION: (595)
 14270 <223> OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
 14272 <220> FEATURE:
 14273 <221> NAME/KEY: SITE
 14274 <222> LOCATION: (703)
 14275 <223> OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
 14277 <400> SEQUENCE: 321
 14278 Lys Leu Asn Asp Lys Asn Arg Glu Ile Met Leu Asn Glu Val Lys Asn
 14279 1 5 10 15
 14281 Ser Val Ile Asp Arg Asn Tyr Lys Lys Ala Tyr Ser Val Ala Lys Leu
 14282 20 25 30
 14284 Leu Gln Asp Lys Tyr Pro Gln Asn Glu Asp Ile Ala Met Leu Thr Asn
 14285 35 40 45
 14287 Thr Leu Ala Glu Ile Ala Asn Ser Ser Pro Phe Glu Ser Lys Asp Leu
 14288 50 55 60
 14290 Gln Arg Asp Ser Ala Asn Gln Ile Leu Asp Lys Ile Lys Gly Gln Asp
 14291 65 70 75 80
 14293 Asn Thr Lys Thr Asn Val Asn Glu Asn Phe Asp Ile Ala Phe Asn Asn
 14294 85 90 95
 14296 Arg Tyr Ile Lys Asp Ser Thr Ile Thr Glu Asn Tyr Ser Asp Arg Asn
 14297 100 105 110
 14299 Asp Asp Val Gly Ile Glu Asp Glu Asp Ile Ser Glu Phe Lys Lys Ser
 14300 115 120 125
 14302 Lys Ile Pro Glu Lys Ile Lys Pro Asn Thr Asn Pro Lys Glu Glu Asp
 14303 130 135 140
 14305 Gln Ile Ile Gln Ser Pro Asn Pro Lys Leu Ser Val Asn Asp Gln Lys
 14306 145 150 155 160
 14308 Asn Leu Phe Asn Leu Glu Lys Leu Lys Lys Asn Leu Ser Gly Lys Ser
 14309 165 170 175
 14311 Asn Ser Glu Asn Ile Leu Asn Asp Ser Gln Lys Ile Glu Asn Asp Lys
 14312 180 185 190
 14314 Gln Asn Thr Asn Leu Ser Lys Glu Lys Asn Ser Glu Asn Ile Leu Lys
 14315 195 200 205
 14317 Thr Pro Asp Asn Ser Lys Tyr Ser Asn Asn Asn Asn Thr Thr Ser Leu
 14318 210 215 220

RAW SEQUENCE LISTING

DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:33

Input Set : N:\COPIES\EBONY\PB481USs1.txt

Output Set: N:\CRF3\05082001\I830230.raw

14320 Lys Lys Ile Ser Ser Asn Ser Gln Lys Glu Ser Glu Leu Ser Pro Pro
 14321 225 230 235 240
 14323 Ser Gln Thr Ile Ile Gly Lys Ile Tyr Arg Pro Tyr Ser Tyr Leu Ile
 14324 245 250 255
 14326 Lys Lys Glu Leu Tyr Glu Ile Leu Asp Asp Ile Asn Thr Gly Arg Val
 14327 260 265 270
 14329 Thr Leu Gly Lys Asn Arg Leu Lys Glu Leu Ile Lys Lys Gly Leu Ser
 14330 275 280 285
 14332 Asn Lys Phe Gln Lys Val Asn Glu Leu Ile Glu Asn Ser Lys Asn Lys
 14333 290 295 300
 14335 Glu Ala Ser Asn Leu Leu Leu Thr Leu Ile Lys Lys Asp Ile Glu Pro
 14336 305 310 315 320
 14338 Asn Leu Ile Asn Ile Pro Lys Asp Pro Tyr Lys Lys Glu Ile Phe Gln
 14339 325 330 335
 14341 Leu Asp Lys Glu Asp Lys Lys Pro Gln Tyr Leu Glu Asp Leu Lys Ser
 14342 340 345 350
 14344 Lys Val His Ser Ile Lys Pro Ile Asp Leu Glu Asn Thr Lys Ser Arg
 14345 355 360 365
 14347 Gln Gln Ala Ile Lys Asp Leu Asn Glu Phe Leu Lys Asn Asn Pro Asn
 14348 370 375 380
 14350 Asp Ala Gln Ala Ser Lys Thr Leu Ala Gln Ala Asn Lys Ile Gln His
 14351 385 390 395 400
 14353 Leu Glu Asp Leu Lys Ser Lys Val His Ser Ile Lys Pro Ile Asp Leu
 14354 405 410 415
 14356 Glu Asn Thr Lys Ser Arg Gln Gln Ala Ile Lys Asp Leu Asn Glu Phe
 14357 420 425 430
 14359 Leu Lys Asn Asn Pro Asn Asp Ala Gln Ala Ser Lys Thr Leu Ala Gln
 14360 435 440 445
 14362 Ala Asn Lys Ile Gln His Leu Glu Asp Leu Lys Ser Lys Val His Ser
 14363 450 455 460
 14365 Ile Lys Pro Ile Asp Leu Glu Asn Thr Lys Ser Arg Gln Gln Ala Ile
 14366 465 470 475 480
 14368 Lys Asp Leu Asn Glu Phe Leu Lys Asn Asn Pro Asn Asp Ala Gln Ala
 14369 485 490 495
 14371 Ser Lys Thr Leu Ala Gln Ala Asn Lys Ile Gln His Leu Glu Asp Leu
 14372 500 505 510
 14374 Lys Ser Lys Val His Ser Ile Lys Pro Ile Asp Leu Glu Asn Thr Lys
 14375 515 520 525
 14377 Ser Arg Gln Gln Ala Ile Lys Asp Leu Asn Glu Phe Xaa Lys Asn Asn
 14378 530 535 540
 14380 Pro Asn Asp Ala Gln Ala Ser Lys Thr Leu Ala Gln Ala Asn Lys Ile
 14381 545 550 555 560
 14383 Gln His Leu Glu Asp Leu Lys Ser Lys Val His Ser Ile Lys Pro Ile
 14384 565 570 575
 14386 Asp Leu Glu Asn Thr Lys Ser Arg Gln Gln Ala Ile Lys Asp Leu Asn
 14387 580 585 590
 14389 Glu Phe Xaa Lys Asn Asn Pro Asn Asp Ala Gln Ala Ser Lys Thr Leu
 14390 595 600 605
 14392 Ala Gln Ala Asn Lys Ile Gln His Leu Glu Asp Leu Lys Ser Lys Val

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DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:33

Input Set : N:\COPIES\EBONY\PB481USsl.txt

Output Set: N:\CRF3\05082001\I830230.raw

14393 610 615 620
 14395 His Ser Ile Lys Pro Ile Asp Leu Glu Asn Thr Lys Ser Arg Gln Gln
 14396 625 630 635 640
 14398 Ala Ile Lys Asp Leu Asn Glu Phe Leu Lys Asn Asn Pro Asn Asp Ala
 14399 645 650 655
 14401 Gln Ala Ser Lys Thr Leu Ala Gln Ala Asn Lys Ile Gln His Leu Glu
 14402 660 665 670
 14404 Asp Leu Lys Ser Lys Val His Ser Ile Lys Pro Ile Asp Leu Glu Asn
 14405 675 680 685
 w-OK 14407 Thr Lys Ser Arg Gln Gln Ala Ile Lys Asp Leu Asn Glu Phe Xaa Lys
 14408 690 695 700
 14410 Asn Asn Pro Asn Asp Ala Gln Ala Ser Lys Thr Leu Ala Gln Ala Tyr
 14411 705 710 715 720
 14413 Glu Asn Asn Gly Asp Leu Leu Lys Ala Glu Asn Ala Tyr Glu Lys Ile
 14414 725 730 735
 14416 Ile Lys Leu Thr Asn Thr Gln Glu Asp His Tyr Lys Leu Gly Ile Ile
 14417 740 745 750
 14419 Arg Phe Lys Leu Lys Lys Tyr Glu His Ser Ile Glu Ser Phe Asp Gln
 14420 755 760 765
 14422 Thr Ile Lys Leu Asp Pro Lys His Lys Lys Ala Leu His Asn Lys Gly
 14423 770 775 780
 14425 Ile Ala Leu Met Met Leu Asn Lys Asn Lys Lys Ala Ile Glu Ser Phe
 14426 785 790 795 800
 14428 Glu Lys Ala Ile Gln Ile Asp Lys Asn Tyr Gly Thr Ala Tyr Tyr Gln
 14429 805 810 815
 14431 Lys Gly Ile Ala Glu Glu Lys Asn Gly Asp Met Gln Gln Ala Phe Ala
 14432 820 825 830
 14434 Ser Phe Lys Asn Ala Tyr Asn Leu Asp Lys Asn Pro Asn Tyr Ala Leu
 14435 835 840 845
 14437 Lys Ala Gly Ile Val Ser Asn Asn Leu Gly Asn Phe Lys Gln Ser Glu
 14438 850 855 860
 14440 Glu Tyr Leu Asn Phe Phe Asn Ala Asn Ala Lys Lys Pro Asn Glu Ile
 14441 865 870 875 880
 14443 Ala Ile Tyr Asn Leu Ser Ile Ala Lys Phe Glu Asn Asn Lys Leu Glu
 14444 885 890 895
 14446 Glu Ser Leu Glu Thr Ile Asn Lys Ala Ile Asp Leu Asn Pro Glu Lys
 14447 900 905 910
 14449 Ser Glu Tyr Leu Tyr Leu Lys Ala Ser Ile Asn Leu Lys Lys Glu Asn
 14450 915 920 925
 14452 Tyr Gln Asn Ala Ile Ser Leu Tyr Ser Leu Val Ile Glu Lys Asn Pro
 14453 930 935 940
 14455 Glu Asn Thr Ser Ala Tyr Ile Asn Leu Ala Lys Ala Tyr Glu Lys Ser
 14456 945 950 955 960
 14458 Gly Asn Lys Ser Gln Ala Ile Ser Thr Leu Glu Lys Ile Ile Asn Lys
 14459 965 970 975
 14461 Asn Asn Lys Leu Ala Leu Asn Asn Leu Gly Ile Leu Tyr Lys Lys Glu
 14462 980 985 990
 14464 Lys Asn Tyr Gln Lys Ala Ile Glu Ile Phe Glu Lys Ala Ile Ile Asn
 14465 995 1000 1005

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DATE: 05/08/2001

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TIME: 12:00:33

Input Set : N:\COPIES\EBONY\PB481USs1.txt

Output Set: N:\CRF3\05082001\I830230.raw

14467 Ser Asp Ile Glu Ala Lys Tyr Asn Leu Ala Thr Thr Leu Ile Glu Ile
 14468 1010 1015 1020
 14470 Asn Asp Asn Thr Arg Ala Lys Asp Leu Leu Arg Glu Tyr Thr Lys Leu
 E--> 14471 025 1025 1030 1035 1040
 14473 Lys Pro Asn Asn Pro Glu Ala Leu His Ala Leu Gly Ile Ile Glu Tyr
 14474 1045 1050 1055
 14476 Asn Glu Asn Asn Asp Gln Thr Leu Arg Glu Leu Ile Lys Lys Phe
 14477 1060 1065 1070
 14479 Pro Asn Tyr Lys Lys Asn Glu Asn Ile Lys Lys Ile Ile Gly Ile
 14480 1075 1080 1085
 16273 <210> SEQ ID NO: 364
 16274 <211> LENGTH: 1036
 16275 <212> TYPE: PRT
 16276 <213> ORGANISM: Homo sapiens
 16278 <400> SEQUENCE: 364
 16279 Met Leu Val Lys Arg Ile Val Gly Lys Pro Ile Thr Met Leu Ile Leu
 16280 1 5 10 15
 16282 Phe Ser Leu Leu Leu Met Ile Ser Leu Tyr Thr Phe Ser Arg Leu Lys
 16283 20 25 30
 16285 Val Asp Leu Leu Pro Gly Ile Asp Ile Pro Gln Ile Ser Ile His Thr
 16286 35 40 45
 16288 Val Tyr Pro Gly Ala Ser Pro Arg Glu Val Glu Glu Ser Val Ser Arg
 16289 50 55 60
 16291 Val Leu Glu Ser Gly Leu Ser Ser Val Lys Asn Leu Lys Asn Ile Tyr
 16292 65 70 75 80
 16294 Ser Val Ser Ser Lys Glu Ser Ser Thr Val Ser Leu Glu Phe Tyr His
 16295 85 90 95
 16297 Gly Thr Asp Leu Asp Leu Val Leu Asn Glu Ile Arg Asp Ala Leu Glu
 16298 100 105 110
 16300 Leu Val Lys Ser Ser Leu Pro Ser Lys Ser Gln Thr Pro Arg Ile Phe
 16301 115 120 125
 16303 Arg Tyr Asn Leu Lys Asn Ile Pro Val Met Glu Ile Val Ile Asn Ser
 16304 130 135 140
 16306 Val Arg Pro Val Ser Glu Leu Lys Arg Tyr Ala Asp Glu Ile Ile Lys
 16307 145 150 155 160
 16309 Pro Gly Leu Glu Arg Leu Asp Gly Val Ala Ile Val Thr Val Asn Gly
 16310 165 170 175
 16312 Gly Ser Lys Lys Arg Val Leu Ile Glu Val Ser Gln Asn Arg Leu Glu
 16313 180 185 190
 16315 Ser Tyr Gly Leu Ser Leu Ser Arg Ile Ser Ser Ile Ile Ala Ser Gln
 16316 195 200 205
 16318 Asn Leu Glu Leu Ser Ala Gly Asn Ile Leu Glu Asn Asn Leu Glu Tyr
 16319 210 215 220
 16321 Leu Val Glu Val Ser Gly Lys Phe Lys Ser Ile Glu Glu Ile Gly Asn
 16322 225 230 235 240
 16324 Val Val Ile Ala Tyr Lys Ile Pro Asp Ile Ser Ser Gly Ile Asn Leu
 16325 245 250 255
 16327 Ser Pro Ile Glu Ile Lys Leu Lys Asp Ile Ala Asn Ile Lys Thr Asp
 16328 260 265 270

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DATE: 05/08/2001

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TIME: 12:00:33

Input Set : N:\COPIES\EBONY\PB481USs1.txt

Output Set: N:\CRF3\05082001\I830230.raw

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16330 Phe Glu Asp Leu Ser Glu Tyr Val Glu Tyr Asn Gly Leu Pro Ser Ile
16331      275      280      285
16333 Ser Leu Ser Val Gln Lys Arg Ser Asp Ser Asn Ser Ile Ala Val Ser
16334      290      295      300
16336 Asn Val Val Met Asn Glu Ile Glu Lys Leu Lys Leu Ser Met Pro Lys
16337 305      310      315      320
16339 Asp Met Lys Leu Glu Ile Ala Ser Asp Ser Thr Asp Phe Ile Lys Ala
16340      325      330      335
16342 Ser Ile Ser Thr Val Val Asn Ser Ala Tyr Phe Gly Ala Met Leu Ala
16343      340      345      350
16345 Ile Phe Val Ile Phe Phe Phe Leu Arg Ser Phe Arg Ala Thr Ile Ile
16346      355      360      365
16348 Ile Gly Ile Ser Ile Pro Ile Ala Ile Val Leu Thr Phe Cys Leu Met
16349      370      375      380
16351 Tyr Phe Val Asn Ile Ser Leu Asn Ile Met Ser Leu Ala Gly Leu Ala
16352 385      390      395      400
16354 Leu Gly Ile Gly Met Val Val Asp Cys Ser Ile Val Val Ile Asp Asn
16355      405      410      415
16357 Ile Tyr Lys Tyr Arg Gln Lys Gly Ala Lys Leu Ile Ser Ser Ile
16358      420      425      430
16360 Leu Gly Ala Gln Glu Met Met Leu Pro Ile Thr Ser Ser Thr Phe Thr
16361      435      440      445
16363 Ser Ile Cys Val Phe Gly Pro Phe Leu Ile Phe Lys Ser Glu Leu Gly
16364      450      455      460
16366 Val Tyr Gly Asp Phe Phe Lys Asp Phe Thr Phe Thr Ile Val Ile Ser
16367 465      470      475      480
16369 Leu Gly Val Ser Leu Leu Val Ala Ile Phe Leu Val Pro Val Leu Ser
16370      485      490      495
16372 Ser His Tyr Val Gly Leu Tyr Thr Ser Phe Gln Lys Asn Ile Lys Asn
16373      500      505      510
16375 Ala Phe Ile Arg Lys Ile Asp Ala Phe Phe Ala Ser Ile Tyr Tyr Phe
16376      515      520      525
16378 Leu Glu Phe Leu Tyr Ile Asn Leu Leu Asn Ile Val Leu Asn His Lys
16379      530      535      540
16381 Leu Ile Phe Gly Leu Ile Val Phe Phe Ser Phe Ile Gly Ser Leu Leu
16382 545      550      555      560
16384 Leu Gly Leu Leu Leu Asp Val Thr Thr Phe Thr Arg Gly Lys Glu Asn
16385      565      570      575
16387 Ser Ile Thr Ile Asn Leu Asn Phe Pro His Lys Thr Asn Leu Glu Tyr
16388      580      585      590
16390 Ala Lys Phe Tyr Ser Asn Arg Phe Leu Glu Ile Val Lys Ser Glu Ala
16391      595      600      605
16393 Lys Gly Tyr Lys Ser Ile Ile Ala Thr Leu Arg Ala Asp Arg Ile Thr
16394      610      615      620
16396 Phe Asn Val Leu Phe Pro Leu Lys Glu Glu Ser Arg Asp Asn Leu Thr
16397 625      630      635      640
16399 Gln Ser Val Asp Tyr Asp Ser Ile Lys Tyr Lys Ile Met Asn Arg Ile
16400      645      650      655
16402 Gly Asn Leu Tyr Pro Glu Phe Asn Ile Glu Pro Ser Ile Ser Gly Asn

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RAW SEQUENCE LISTING

DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:33

Input Set : N:\COPIES\EBONY\PB481USs1.txt

Output Set: N:\CRF3\05082001\I830230.raw

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16403          660          665          670
16405 Ala Leu Gly Gly Gly Asp Ser Ile Lys Ile Lys Ile Ser Ala Asn Asp
16406          675          680          685
16408 Phe Glu Tyr Ile Lys Asp Tyr Gly Lys Ile Leu Val Ser Met Leu Lys
16409          690          695          700
16411 Lys Glu Ile Pro Glu Leu Val Asn Pro Arg Leu Ser Ile Ser Asp Phe
16412 705          710          715          720
16414 Gln Leu Gln Ile Gly Val Glu Ile Asp Arg Ala Leu Val Tyr Asn Tyr
16415          725          730          735
16417 Gly Ile Asp Met Asn Thr Ile Leu Asn Glu Leu Lys Ala Asn Ile Asn
16418          740          745          750
16420 Gly Val Val Ala Gly Gln Tyr Val Glu Lys Gly Leu Asn Tyr Asp Ile
16421          755          760          765
16423 Val Leu Lys Leu Asp Arg Met Asp Val Lys Asn Leu Lys Asp Leu Glu
16424          770          775          780
16426 Lys Ile Phe Ile Thr Asn Ser Ser Gly Val Lys Ile Pro Phe Ser Ser
16427 785          790          795          800
16429 Ile Ala Thr Phe Glu Lys Thr Asn Lys Ala Glu Ser Ile Tyr Arg Glu
16430          805          810          815
16432 Asn Gln Ala Leu Thr Ile Tyr Leu Asn Ala Gly Ile Ser Pro Asp Asp
16433          820          825          830
16435 Asn Leu Thr Gln Val Thr Ala Lys Val Val Asp Phe Ile Asn Asn Lys
16436          835          840          845
16438 Val Pro His Lys Lys Glu Gly Ile Thr Leu Lys Val Glu Gly Glu Tyr Asn
16439          850          855          860
16441 Glu Phe Ser Asn Ile Met Asn Gln Phe Lys Ile Ile Ile Met Met Ala
16442 865          870          875          880
16444 Ile Ile Val Val Phe Gly Ile Met Ala Ser Gln Phe Glu Ser Phe Leu
16445          885          890          895
16447 Lys Pro Phe Ile Ile Ile Phe Thr Ile Pro Leu Thr Ala Ile Gly Val
16448          900          905          910
16450 Val Leu Ile His Phe Leu Ala Gly Glu Lys Leu Ser Ile Phe Ala Ala
16451          915          920          925
16453 Ile Gly Met Leu Met Leu Val Gly Val Val Val Asn Thr Gly Ile Val
16454          930          935          940
16456 Leu Val Asp Tyr Thr Gly Leu Leu Ile Lys Arg Gly Phe Gly Leu Arg
16457 945          950          955          960
16459 Glu Ala Ile Ile Glu Ser Cys Arg Ser Arg Leu Arg Pro Ile Leu Met
16460          965          970          975
16462 Ser Ser Leu Thr Ser Ile Ile Gly Leu Ile Pro Met Ala Phe Ser Ser
16463          980          985          990
16465 Gly Ser Gly Asn Glu Leu Leu Lys Pro Ile Ala Phe Thr Phe Ile Gly
16466          995          1000          1005
16468 Gly Met Thr Ala Ser Thr Phe Leu Thr Leu Phe Phe Ile Pro Met Leu
16469          1010          1015          1020
16471 Phe Glu Ile Phe Pro Thr Cys Phe Lys Phe Gln Ile
E--> 16472 025/025          1030          1035
18632 <210> SEQ ID NO: 412
18633 <211> LENGTH: 1494

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RAW SEQUENCE LISTING DATE: 05/08/2001
 PATENT APPLICATION: US/09/830,230 TIME: 12:00:34

Input Set : N:\COPIES\EBONY\PB481USs1.txt
 Output Set: N:\CRF3\05082001\I830230.raw

```

18634 <212> TYPE: PRT
18635 <213> ORGANISM: Homo sapiens
18637 <400> SEQUENCE: 412
18638 Met Lys Lys Ala Asn Phe Leu Ser Thr Asn Phe Leu Ile Leu Leu Leu
18639      1      5      10      15
18641 Val Cys Phe Val Asn Val Asn Leu Phe Ser Lys Asp Ile Phe Lys Phe
18642      20      25      30
18644 Lys Leu Val Asp Gln Phe Phe Pro Phe Tyr Tyr Lys Asn Asn Lys Gly
18645      35      40      45
18647 Glu Tyr Glu Gly Leu Ile Phe Ser Ile Leu Asp Lys Trp Ala Lys Asp
18648      50      55      60
18650 Asn Asn Ala Asp Ile Met Val Glu His Ile Asp Asn Leu Asn Glu Ser
18651      65      70      75      80
18653 Glu Ile Glu Asp Glu Ala Ile Tyr Leu Gly Leu Thr Tyr Asn Val Lys
18654      85      90      95
18656 Leu Asn Asp Phe Phe Tyr Phe Lys Ser Glu Leu Ala Arg Ser Ile Ser
18657      100     105     110
18659 Ile Leu Phe Phe Lys Asn Ser Asn Lys Lys Tyr Lys Asn Thr His Ser
18660      115     120     125
18662 Thr Phe Leu Ser Asn Phe Asn Ile Gly Val Ile Lys Asn Thr Ile Tyr
18663      130     135     140
18665 Glu Asp Ile Leu Arg Leu Lys Asn Val Asn Thr Ile Phe Leu Ala Asp
18666      145     150     155     160
18668 Asn Ser Gln Glu Leu Val Leu Ala Leu Lys Asn Asp Lys Val Asp Tyr
18669      165     170     175
18671 Ile Tyr Gly Asp Cys Lys Thr Leu His Tyr Ile Ala Asn Asn Phe Leu
18672      180     185     190
18674 Ser Glu Asp Leu Val Ile Phe Thr Gly Asp Val Phe Tyr Ser Ile Lys
18675      195     200     205
18677 Asn Arg Val Ala Ile Ser Arg Asn Ala Pro Glu Ile Val Lys Asn Leu
18678      210     215     220
18680 Asn Leu Asp Leu Phe Ser Tyr Leu Met Lys Met Pro Glu Glu Leu Val
18681      225     230     235     240
18683 Phe Ser Phe Leu Asp Ser Asn Ala Lys Gly Ser Phe Val Asp Val Gly
18684      245     250     255
18686 Leu Tyr Asn Asp Tyr Pro Pro Leu Ser Phe Ile Asn Ser Gln Gly Lys
18687      260     265     270
18689 Leu Ser Gly Ile Leu Val Asp Leu Trp Asn Leu Leu Ser Arg Gln His
18690      275     280     285
18692 Ile Phe Lys Pro Ile Phe Lys Gly Phe Ser Lys Glu Asp Ile Lys Lys
18693      290     295     300
18695 Ser Leu Asp Gly Lys Ser Val Gly Ile Phe Gly Gly Ile Ile Ser Asn
18696      305     310     315     320
18698 Asp Ser Val Leu Glu Asn Val Asn Tyr Val Val Ser Lys Pro Ile Tyr
18699      325     330     335
18701 Pro Leu Asn Phe Lys Phe Tyr Ser Lys Asp Leu Ser Asn Asp Ala Gly
18702      340     345     350
18704 Pro Ile Asn Ser Gln Phe Ile Asp Phe Asn Phe Asn Asn Ile Gln Leu
18705      355     360     365

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RAW SEQUENCE LISTING

DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:34

Input Set : N:\COPIES\EBONY\PB481USs1.txt

Output Set: N:\CRF3\05082001\I830230.raw

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18707 Asn Lys Asn Lys Asp Ile Val Asn Asn Phe Ile Asp Ile Val Asn Asn
18708      370      375      380
18710 Ser Tyr Gly Phe Ile Glu Asn Ser Ile Thr Thr Lys Tyr Leu Leu Lys
18711 385      390      395      400
18713 Leu Asn Gly Tyr Asn Gly Arg Leu Lys Ser Tyr Asp Ser Ile Phe Asn
18714      405      410      415
18716 Lys Asn Arg Phe Leu Val Leu Ala Ile Asp Asn Arg Ile Tyr Lys Val
18717      420      425      430
18719 Ile Lys Tyr Ile Leu Asn Ser Ile Phe Asp Asp Ile Ser Phe Glu Ser
18720      435      440      445
18722 Leu Leu Gln Ile Asp Lys Asn Trp Leu Asp Lys Glu Glu Ile Asn Ser
18723      450      455      460
18725 Ser Arg Ile Asn Ser Tyr Lys Ile Met Asn Lys Val Lys Phe Asn Ile
18726 465      470      475      480
18728 Glu Glu Lys Ile Trp Leu Ser Lys Asn Asn Lys Leu Asn Leu Ala Val
18729      485      490      495
18731 Lys Asn Trp Tyr Pro Ile Asp Tyr Val Glu Ala Asn Asn Tyr Lys Gly
18732      500      505      510
18734 Ile Asn Gln Phe Leu Leu Asp Lys Ile Arg Met Phe Ser Gly Leu Arg
18735      515      520      525
18737 Phe Asn Ile Ile Lys Val His Ser Ser Leu Asp Leu Lys Lys Leu Ile
18738      530      535      540
18740 Lys Ser Gly Lys Ile Asp Met Leu Asn Thr Asn Ala Thr Asp Ser Asn
18741 545      550      555      560
18743 Leu Asp Asn Val Phe Asn Ile Lys Leu Asn Ser Arg Ile Pro Leu Tyr
18744      565      570      575
18746 Ile Phe Ser Asn Lys Lys Arg Val Leu Pro Ser Arg Ser Leu Glu Lys
18747      580      585      590
18749 Phe Ala Ile Leu Asp Phe Leu Tyr Ser Lys Asn Leu Ala Ser Asn Ile
18750      595      600      605
18752 Lys Ser Lys Leu Ile Leu Val Ser Ser Phe Asn Glu Ala Leu Leu Leu
18753      610      615      620
18755 Leu Tyr Lys Gly Lys Val Asp Gly Ile Ile Ser Asp Glu Tyr Thr Ala
18756 625      630      635      640
18758 Ala Ala Val Phe Glu Glu Leu Asn Ile Asp Asp Val Glu Lys Ile Pro
18759      645      650      655
18761 Thr Phe Arg Asp Leu Ala Phe Asp Leu Ser Leu Ala Ile Tyr Asn Gln
18762      660      665      670
18764 Asp Tyr Ile Leu Lys Glu Ile Ile Gln Lys Val Val Met Arg Ser Asn
18765      675      680      685
18767 Val Asp Ser Gln Met Tyr Leu Asn Asp Trp Lys Phe Asp Ile Tyr Tyr
18768      690      695      700
18770 Lys Ser Arg Ser Ile Arg Phe Lys Asn Phe Lys Phe Leu Val Ile Thr
18771 705      710      715      720
18773 Phe Ile Ile Phe Tyr Phe Thr Phe Leu Gly Phe Val Ile Ile Phe Met
18774      725      730      735
18776 Phe Arg Leu Ser Phe Glu Gln Lys Arg Arg Tyr Ser Phe Val Met Asn
18777      740      745      750
18779 Glu Lys Lys Ile Ala Glu Ala Ala Asn Ala Ala Lys Thr Ile Phe Ile

```

RAW SEQUENCE LISTING DATE: 05/08/2001
 PATENT APPLICATION: US/09/830,230 TIME: 12:00:34

Input Set : N:\COPIES\EBONY\PB481USsl.txt
 Output Set: N:\CRF3\05082001\I830230.raw

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18780      755      760      765
18782 Ala Asn Val Ser His Asp Ile Arg Thr Pro Ile Asn Gly Ile Met Ala
18783      770      775      780
18785 Ala Thr Glu Leu Leu Asp Thr Thr Ile Leu Thr Asp Val Gln Lys Asp
18786 785      790      795      800
18788 Tyr Val Arg Met Ile Asn Tyr Ser Ser Asp Ser Leu Leu Ser Leu Ile
18789      805      810      815
18791 Asp Asp Ile Leu Tyr Leu Ser Lys Ile Asp Val Asn Glu Leu Tyr Val
18792      820      825      830
18794 Glu Ser Gln Glu Ile Asp Leu Glu Ser Glu Met Glu Met Val Leu Lys
18795      835      840      845
18797 Ala Phe Gln Ser Gln Cys Ala Lys Lys Asn Ile Asp Leu Phe Ser Tyr
18798      850      855      860
18800 Ser Lys Ser Ile Phe Asn Asn Tyr Ile Lys Gly Asp Ile Val Lys Ile
18801 865      870      875      880
18803 Lys Gln Val Leu Ile Asn Leu Ile Gly Asn Ala Phe Lys Phe Thr Asp
18804      885      890      895
18806 Asp Gly Val Ile Val Leu Asn Tyr Glu Glu Val Cys Arg Thr Arg Thr
18807      900      905      910
18809 Asp Gly Asn Arg Val Leu Val Thr Val Glu Phe Lys Val Ile Asp Thr
18810      915      920      925
18812 Gly Lys Gly Ile Glu Lys Glu Asn Phe Ser Lys Ile Phe Glu Ile Phe
18813      930      935      940
18815 Lys Gln Glu Asp Asp Ser Ser Ser Arg Val His Glu Gly Ala Gly Leu
18816 945      950      955      960
18818 Gly Leu Ser Ile Ser Arg Glu Leu Ile Arg Leu Met Gly Gly Leu Gly
18819      965      970      975
18821 Ile Ala Val Asp Ser Lys Val Gly Glu Gly Thr Thr Phe Ser Phe Met
18822      980      985      990
18824 Leu Pro Phe Leu Leu Gly Ser Glu Leu Lys Ser Lys Lys Leu Ser Ile
18825      995      1000      1005
18827 Asn Arg Phe Gln Ser Val Asn Gly Asp Asn Lys Val Leu Asn Val Leu
18828      1010      1015      1020
18830 Leu Ser Gln Lys Ser Ile Lys Ile Phe Glu His Cys Ser Ile Leu Leu
E--> 18831 1025      1030      1035      1040
18833 Gly Cys Ser Ser Asn Val Arg Tyr Val Ala Ser Phe Glu Asp Ala Tyr
18834      1045      1050      1055
18836 Lys Val Phe Lys Lys Tyr Pro Ser Tyr Asn Phe Val Tyr Ile Asn Val
18837      1060      1065      1070
18839 Asn Asn Asp Asn Ile Gln Glu Gly Ile Arg Leu Ala Asn Asn Ile Glu
18840      1075      1080      1085
18842 Arg Leu Asn Ser Asp Val Gln Ile Ile Phe Leu Phe Tyr Tyr Leu Asp
18843      1090      1095      1100
18845 Asn Lys Ala Leu Lys Asn Leu Lys Tyr Gly Tyr Val Lys Lys Pro Leu
E--> 18846 1105      1110      1115      1120
18848 Met Gly Leu Gly Ile Cys Ser Ile Leu Tyr Lys Lys Glu Phe Asn Pro
18849      1125      1130      1135
18851 Glu Met Asp Phe Glu Asp Leu Val Pro Ile Asp Ser Ala Leu Arg Ile
18852      1140      1145      1150

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RAW SEQUENCE LISTING

DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:34

Input Set : N:\COPIES\EBONY\PB481USsl.txt

Output Set: N:\CRF3\05082001\I830230.raw

18854 Lys Glu Pro Ile Asn Val Leu Ile Ala Glu Asp Asn Gln Val Asn Gln
18855 1155 1160 1165
18857 Lys Val Leu Lys Asp Ile Leu Val Val Ile Gly Ile Asn Glu Asn Phe
18858 1170 1175 1180
18860 Ile Asp Val Val Asp Asp Gly Val Lys Ala Leu Lys Ser Leu Lys Asp
E--> 18861 185 1190 1195 1200
18863 Lys Lys Tyr Thr Ile Ser Phe Ile Asp Ile Arg Met Pro Arg Tyr Asp
18864 1205 1210 1215
18866 Gly Phe Ser Val Ala Lys Glu Ile Arg Lys Phe Glu Lys Ala Lys Asn
18867 1220 1225 1230
18869 Leu Lys Pro Cys Val Leu Val Ala Val Thr Ala His Ala Leu Gln Glu
18870 1235 1240 1245
18872 Tyr Lys Asp Lys Cys Leu Ala Ser Gly Met Asn Asp Tyr Ile Ser Lys
18873 1250 1255 1260
18875 Pro Ile His Ile Ser Ser Ile Lys Thr Ile Leu Lys Lys Tyr Leu Gln
E--> 18876 265 1270 1275 1280
18878 Phe Glu Val Asp Asp Ile Gly Glu Asn Glu Asn Leu Asn Gln Leu Val
18879 1285 1290 1295
18881 Lys Phe Pro Asn Leu Asp Val Asn Arg Ala Leu Lys Glu Leu Asn Leu
18882 1300 1305 1310
18884 Ser Tyr Val Ser Tyr Ser Glu Leu Cys Arg Gly Leu Val Asp Phe Ile
18885 1315 1320 1325
18887 Ser Ile Asn Ile Ile Asp Leu Glu Lys Ala Phe Asp Glu Glu Asp Leu
18888 1330 1335 1340
18890 Ser Leu Ile Lys Asp Ile Ser His Ser Ile Ser Gly Ala Leu Ser Asn
E--> 18891 345 1350 1355 1360
18893 Met Arg Ser Glu Leu Tyr Lys Asp Phe Gln Lys Ile Glu Thr Ser Lys
18894 1365 1370 1375
18896 Asp Ser Ile Ser Glu Leu Lys Lys Met Tyr Ser Phe Val Lys Asp Asp
18897 1380 1385 1390
18899 Leu Phe Gln Leu Ile Ser Asp Ile Lys Glu Asn Ile Leu Phe Glu Ser
18900 1395 1400 1405
18902 Glu Ile Val Ser Glu Asn Lys Leu Tyr Phe Lys Asn Asn Asp Gln Phe
18903 1410 1415 1420
18905 Leu Asn Leu Leu Asn Lys Leu Leu Ile Gly Ile Lys Thr Arg Lys Pro
E--> 18906 425 1430 1435 1440
18908 Arg Glu Tyr Lys Glu Ile Leu Glu Ser Ile Asn Lys Tyr Val Leu Asp
18909 1445 1450 1455
18911 Asp Asn Ile Gln Val Leu Phe Ser Asp Leu Arg Arg Asn Leu Arg Leu
18912 1460 1465 1470
18914 Tyr Arg Phe Ala Glu Ser Ser Lys Ile Leu Glu Glu Ile Ile Glu Met
18915 1475 1480 1485
18917 Leu Asn Asn Lys Arg Tyr
18918 1490
18920 <210> SEQ ID NO: 413
18921 <211> LENGTH: 1477
18922 <212> TYPE: PRT
18923 <213> ORGANISM: Homo sapiens
18925 <400> SEQUENCE: 413

pp 24-25

RAW SEQUENCE LISTING

DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:34

Input Set : N:\COPIES\EBONY\PB481USs1.txt

Output Set: N:\CRF3\05082001\I830230.raw

```

18926 Cys Phe Val Asn Val Asn Leu Phe Ser Lys Asp Ile Phe Lys Phe Lys
18927 1 5 10 15
18929 Leu Val Asp Gln Phe Phe Pro Phe Tyr Tyr Lys Asn Asn Lys Gly Glu
18930 20 25 30
18932 Tyr Glu Gly Leu Ile Phe Ser Ile Leu Asp Lys Trp Ala Lys Asp Asn
18933 35 40 45
18935 Asn Ala Asp Ile Met Val Glu His Ile Asp Asn Leu Asn Glu Ser Glu
18936 50 55 60
18938 Ile Glu Asp Glu Ala Ile Tyr Leu Gly Leu Thr Tyr Asn Val Lys Leu
18939 65 70 75 80
18941 Asn Asp Phe Phe Tyr Phe Lys Ser Glu Leu Ala Arg Ser Ile Ser Ile
18942 85 90 95
18944 Leu Phe Phe Lys Asn Ser Asn Lys Lys Tyr Lys Asn Thr His Ser Thr
18945 100 105 110
18947 Phe Leu Ser Asn Phe Asn Ile Gly Val Ile Lys Asn Thr Ile Tyr Glu
18948 115 120 125
18950 Asp Ile Leu Arg Leu Lys Asn Val Asn Thr Ile Phe Leu Ala Asp Asn
18951 130 135 140
18953 Ser Gln Glu Leu Val Leu Ala Leu Lys Asn Asp Lys Val Asp Tyr Ile
18954 145 150 155 160
18956 Tyr Gly Asp Cys Lys Thr Leu His Tyr Ile Ala Asn Asn Phe Leu Ser
18957 165 170 175
18959 Glu Asp Leu Val Ile Phe Thr Gly Asp Val Phe Tyr Ser Ile Lys Asn
18960 180 185 190
18962 Arg Val Ala Ile Ser Arg Asn Ala Pro Glu Ile Val Lys Asn Leu Asn
18963 195 200 205
18965 Leu Asp Leu Phe Ser Tyr Leu Met Lys Met Pro Glu Glu Leu Val Phe
18966 210 215 220
18968 Ser Phe Leu Asp Ser Asn Ala Lys Gly Ser Phe Val Asp Val Gly Leu
18969 225 230 235 240
18971 Tyr Asn Asp Tyr Pro Pro Leu Ser Phe Ile Asn Ser Gln Gly Lys Leu
18972 245 250 255
18974 Ser Gly Ile Leu Val Asp Leu Trp Asn Leu Leu Ser Arg Gln His Ile
18975 260 265 270
18977 Phe Lys Pro Ile Phe Lys Gly Phe Ser Lys Glu Asp Ile Lys Lys Ser
18978 275 280 285
18980 Leu Asp Gly Lys Ser Val Gly Ile Phe Gly Gly Ile Ile Ser Asn Asp
18981 290 295 300
18983 Ser Val Leu Glu Asn Val Asn Tyr Val Val Ser Lys Pro Ile Tyr Pro
18984 305 310 315 320
18986 Leu Asn Phe Lys Phe Tyr Ser Lys Asp Leu Ser Asn Asp Ala Gly Pro
18987 325 330 335
18989 Ile Asn Ser Gln Phe Ile Asp Phe Asn Phe Asn Asn Ile Gln Leu Asn
18990 340 345 350
18992 Lys Asn Lys Asp Ile Val Asn Asn Phe Ile Asp Ile Val Asn Asn Ser
18993 355 360 365
18995 Tyr Gly Phe Ile Glu Asn Ser Ile Thr Thr Lys Tyr Leu Leu Lys Leu
18996 370 375 380
18998 Asn Gly Tyr Asn Gly Arg Leu Lys Ser Tyr Asp Ser Ile Phe Asn Lys

```

RAW SEQUENCE LISTING

DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:34

Input Set : N:\COPIES\EBONY\PB481USs1.txt

Output Set: N:\CRF3\05082001\I830230.raw

```

18999 385          390          395          400
19001 Asn Arg Phe Leu Val Leu Ala Ile Asp Asn Arg Ile Tyr Lys Val Ile
19002          405          410          415
19004 Lys Tyr Ile Leu Asn Ser Ile Phe Asp Asp Ile Ser Phe Glu Ser Leu
19005          420          425          430
19007 Leu Gln Ile Asp Lys Asn Trp Leu Asp Lys Glu Glu Ile Asn Ser Ser
19008          435          440          445
19010 Arg Ile Asn Ser Tyr Lys Ile Met Asn Lys Val Lys Phe Asn Ile Glu
19011          450          455          460
19013 Glu Lys Ile Trp Leu Ser Lys Asn Asn Lys Leu Asn Leu Ala Val Lys
19014 465          470          475          480
19016 Asn Trp Tyr Pro Ile Asp Tyr Val Glu Ala Asn Asn Tyr Lys Gly Ile
19017          485          490          495
19019 Asn Gln Phe Leu Asp Lys Ile Arg Met Phe Ser Gly Leu Arg Phe
19020          500          505          510
19022 Asn Ile Ile Lys Val His Ser Ser Leu Asp Leu Lys Lys Leu Ile Lys
19023          515          520          525
19025 Ser Gly Lys Ile Asp Met Leu Asn Thr Asn Ala Thr Asp Ser Asn Leu
19026          530          535          540
19028 Asp Asn Val Phe Asn Ile Lys Leu Asn Ser Arg Ile Pro Leu Tyr Ile
19029 545          550          555          560
19031 Phe Ser Asn Lys Lys Arg Val Leu Pro Ser Arg Ser Leu Glu Lys Phe
19032          565          570          575
19034 Ala Ile Leu Asp Phe Leu Tyr Ser Lys Asn Leu Ala Ser Asn Ile Lys
19035          580          585          590
19037 Ser Lys Leu Ile Leu Val Ser Ser Phe Asn Glu Ala Leu Leu Leu
19038          595          600          605
19040 Tyr Lys Gly Lys Val Asp Gly Ile Ile Ser Asp Glu Tyr Thr Ala Ala
19041          610          615          620
19043 Ala Val Phe Glu Glu Leu Asn Ile Asp Asp Val Glu Lys Ile Pro Thr
19044 625          630          635          640
19046 Phe Arg Asp Leu Ala Phe Asp Leu Ser Leu Ala Ile Tyr Asn Gln Asp
19047          645          650          655
19049 Tyr Ile Leu Lys Glu Ile Ile Gln Lys Val Val Met Arg Ser Asn Val
19050          660          665          670
19052 Asp Ser Gln Met Tyr Leu Asn Asp Trp Lys Phe Asp Ile Tyr Tyr Lys
19053          675          680          685
19055 Ser Arg Ser Ile Arg Phe Lys Asn Phe Lys Phe Leu Val Ile Thr Phe
19056          690          695          700
19058 Ile Ile Phe Tyr Phe Thr Phe Leu Gly Phe Val Ile Ile Phe Met Phe
19059 705          710          715          720
19061 Arg Leu Ser Phe Glu Gln Lys Arg Arg Tyr Ser Phe Val Met Asn Glu
19062          725          730          735
19064 Lys Lys Ile Ala Glu Ala Ala Asn Ala Ala Lys Thr Ile Phe Ile Ala
19065          740          745          750
19067 Asn Val Ser His Asp Ile Arg Thr Pro Ile Asn Gly Ile Met Ala Ala
19068          755          760          765
19070 Thr Glu Leu Leu Asp Thr Thr Ile Leu Thr Asp Val Gln Lys Asp Tyr
19071          770          775          780

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RAW SEQUENCE LISTING

DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:34

Input Set : N:\COPIES\EBONY\PB481USsl.txt

Output Set: N:\CRF3\05082001\I830230.raw

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19073 Val Arg Met Ile Asn Tyr Ser Ser Asp Ser Leu Leu Ser Leu Ile Asp
19074 785 790 795 800
19076 Asp Ile Leu Tyr Leu Ser Lys Ile Asp Val Asn Glu Leu Tyr Val Glu
19077 805 810 815
19079 Ser Gln Glu Ile Asp Leu Glu Ser Glu Met Glu Met Val Leu Lys Ala
19080 820 825 830
19082 Phe Gln Ser Gln Cys Ala Lys Lys Asn Ile Asp Leu Phe Ser Tyr Ser
19083 835 840 845
19085 Lys Ser Ile Phe Asn Asn Tyr Ile Lys Gly Asp Ile Val Lys Ile Lys
19086 850 855 860
19088 Gln Val Leu Ile Asn Leu Ile Gly Asn Ala Phe Lys Phe Thr Asp Asp
19089 865 870 875 880
19091 Gly Val Ile Val Leu Asn Tyr Glu Glu Val Cys Arg Thr Arg Thr Asp
19092 885 890 895
19094 Gly Asn Arg Val Leu Val Thr Val Glu Phe Lys Val Ile Asp Thr Gly
19095 900 905 910
19097 Lys Gly Ile Glu Lys Glu Asn Phe Ser Lys Ile Phe Glu Ile Phe Lys
19098 915 920 925
19100 Gln Glu Asp Asp Ser Ser Ser Arg Val His Glu Gly Ala Gly Leu Gly
19101 930 935 940
19103 Leu Ser Ile Ser Arg Glu Leu Ile Arg Leu Met Gly Gly Leu Gly Ile
19104 945 950 955 960
19106 Ala Val Asp Ser Lys Val Gly Glu Gly Thr Thr Phe Ser Phe Met Leu
19107 965 970 975
19109 Pro Phe Leu Leu Gly Ser Glu Leu Lys Ser Lys Lys Leu Ser Ile Asn
19110 980 985 990
19112 Arg Phe Gln Ser Val Asn Gly Asp Asn Lys Val Leu Asn Val Leu Leu
19113 995 1000 1005
19115 Ser Gln Lys Ser Ile Lys Ile Phe Glu His Cys Ser Ile Leu Leu Gly
19116 1010 1015 1020
19118 Cys Ser Ser Asn Val Arg Tyr Val Ala Ser Phe Glu Asp Ala Tyr Lys
E--> 19119 025 1030 1035 1040
19121 Val Phe Lys Lys Tyr Pro Ser Tyr Asn Phe Val Tyr Ile Asn Val Asn
19122 1045 1050 1055
19124 Asn Asp Asn Ile Gln Glu Gly Ile Arg Leu Ala Asn Asn Ile Glu Arg
19125 1060 1065 1070
19127 Leu Asn Ser Asp Val Gln Ile Ile Phe Leu Phe Tyr Tyr Leu Asp Asn
19128 1075 1080 1085
19130 Lys Ala Leu Lys Asn Leu Lys Tyr Gly Tyr Val Lys Lys Pro Leu Met
19131 1090 1095 1100
19133 Gly Leu Gly Ile Cys Ser Ile Leu Tyr Lys Lys Glu Phe Asn Pro Glu
E--> 19134 105 1110 1115 1120
19136 Met Asp Phe Glu Asp Leu Val Pro Ile Asp Ser Ala Leu Arg Ile Lys
19137 1125 1130 1135
19139 Glu Pro Ile Asn Val Leu Ile Ala Glu Asp Asn Gln Val Asn Gln Lys
19140 1140 1145 1150
19142 Val Leu Lys Asp Ile Leu Val Val Ile Gly Ile Asn Glu Asn Phe Ile
19143 1155 1160 1165
19145 Asp Val Val Asp Asp Gly Val Lys Ala Leu Lys Ser Leu Lys Asp Lys

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RAW SEQUENCE LISTING

DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:34

Input Set : N:\COPIES\EBONY\PB481USsl.txt

Output Set: N:\CRF3\05082001\I830230.raw

```

19146      1170      1175      1180
19148 Lys Tyr Thr Ile Ser Phe Ile Asp Ile Arg Met Pro Arg Tyr Asp Gly
E--> 19148 185      1190      1195      1200
19151 Phe Ser Val Ala Lys Glu Ile Arg Lys Phe Glu Lys Ala Lys Asn Leu
19152      1205      1210      1215
19154 Lys Pro Cys Val Leu Val Ala Val Thr Ala His Ala Leu Gln Glu Tyr
19155      1220      1225      1230
19157 Lys Asp Lys Cys Leu Ala Ser Gly Met Asn Asp Tyr Ile Ser Lys Pro
19158      1235      1240      1245
19160 Ile His Ile Ser Ser Ile Lys Thr Ile Leu Lys Lys Tyr Leu Gln Phe
19161      1250      1255      1260
19163 Glu Val Asp Asp Ile Gly Glu Asn Glu Asn Leu Asn Gln Leu Val Lys
E--> 19164 265      1270      1275      1280
19166 Phe Pro Asn Leu Asp Val Asn Arg Ala Leu Lys Glu Leu Asn Leu Ser
19167      1285      1290      1295
19169 Tyr Val Ser Tyr Ser Glu Leu Cys Arg Gly Leu Val Asp Phe Ile Ser
19170      1300      1305      1310
19172 Ile Asn Ile Ile Asp Leu Glu Lys Ala Phe Asp Glu Glu Asp Leu Ser
19173      1315      1320      1325
19175 Leu Ile Lys Asp Ile Ser His Ser Ile Ser Gly Ala Leu Ser Asn Met
19176      1330      1335      1340
19178 Arg Ser Glu Leu Tyr Lys Asp Phe Gln Lys Ile Glu Thr Ser Lys Asp
E--> 19179 345      1350      1355      1360
19181 Ser Ile Ser Glu Leu Lys Lys Met Tyr Ser Phe Val Lys Asp Asp Leu
19182      1365      1370      1375
19184 Phe Gln Leu Ile Ser Asp Ile Lys Glu Asn Ile Leu Phe Glu Ser Glu
19185      1380      1385      1390
19187 Ile Val Ser Glu Asn Lys Leu Tyr Phe Lys Asn Asn Asp Gln Phe Leu
19188      1395      1400      1405
19190 Asn Leu Leu Asn Lys Leu Leu Ile Gly Ile Lys Thr Arg Lys Pro Arg
19191      1410      1415      1420
19193 Glu Tyr Lys Glu Ile Leu Glu Ser Ile Asn Lys Tyr Val Leu Asp Asp
E--> 19194 425      1430      1435      1440
19196 Asn Ile Gln Val Leu Phe Ser Asp Leu Arg Arg Asn Leu Arg Leu Tyr
19197      1445      1450      1455
19199 Arg Phe Ala Glu Ser Ser Lys Ile Leu Glu Glu Ile Ile Glu Met Leu
19200      1460      1465      1470
19202 Asn Asn Lys Arg Tyr
19203      1475
28244 <210> SEQ ID NO: 630
28245 <211> LENGTH: 1328
28246 <212> TYPE: PRT
28247 <213> ORGANISM: Homo sapiens
28249 <220> FEATURE:
28250 <221> NAME/KEY: SITE
28251 <222> LOCATION: (379)
28252 <223> OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
28254 <220> FEATURE:
28255 <221> NAME/KEY: SITE .

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P. 29

RAW SEQUENCE LISTING

DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:36

Input Set : N:\COPIES\EBONY\PB481USsl.txt

Output Set: N:\CRF3\05082001\I830230.raw

28256 <222> LOCATION: (382)
 28257 <223> OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
 28259 <220> FEATURE:
 28260 <221> NAME/KEY: SITE
 28261 <222> LOCATION: (403)
 28262 <223> OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
 28264 <220> FEATURE:
 28265 <221> NAME/KEY: SITE
 28266 <222> LOCATION: (414)
 28267 <223> OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
 28269 <220> FEATURE:
 28270 <221> NAME/KEY: SITE
 28271 <222> LOCATION: (415)
 28272 <223> OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
 28274 <220> FEATURE:
 28275 <221> NAME/KEY: SITE
 28276 <222> LOCATION: (416)
 28277 <223> OTHER INFORMATION: Xaa equals any of the naturally occurring L-amino acids
 28279 <400> SEQUENCE: 630
 28280 Ala Gly Asn Thr Val Lys Thr Ala Glu Gly Ala Ser Ser Gly Thr Asp
 28281 1 5 10 15
 28283 Ala Ile Gly Glu Val Val Asp Asn Asp Ala Lys Val Ala Asp Lys Ala
 28284 20 25 30
 28286 Ser Val Thr Gly Ile Ala Lys Gly Ile Lys Glu Ile Val Glu Ala Ala
 28287 35 40 45
 28289 Arg Gly Ser Glu Lys Leu Lys Val Ala Ala Ala Lys Glu Gly Asn Glu
 28290 50 55 60
 28292 Lys Ala Gly Lys Leu Phe Gly Lys Ala Gly Ala Asn Ala His Gly Asp
 28293 65 70 75 80
 28295 Ser Glu Ala Ala Ser Lys Ala Ala Gly Ala Val Ser Ala Val Ser Gly
 28296 85 90 95
 28298 Glu Gln Ile Leu Ser Ala Ile Val Lys Ala Ala Asp Ala Ala Glu Gln
 28299 100 105 110
 28301 Asp Gly Lys Lys Pro Ala Asp Ala Thr Asn Pro Ile Ala Ala Ile
 28302 115 120 125
 28304 Gly Asn Lys Asp Glu Asp Ala Asp Phe Gly Asp Gly Met Lys Lys Asp
 28305 130 135 140
 28307 Asp Gln Ile Ala Ala Ala Ile Ala Leu Arg Gly Met Ala Lys Asp Gly
 28308 145 150 155 160
 28310 Lys Phe Ala Val Lys Asn Asp Glu Lys Gly Lys Ala Glu Gly Ala Ile
 28311 165 170 175
 28313 Lys Gly Ala Ala Ala Ile Gly Glu Val Val Asp Asn Ala Gly Ala Ala
 28314 180 185 190
 28316 Lys Ala Ala Asp Lys Asp Ser Val Lys Gly Ile Ala Lys Gly Ile Lys
 28317 195 200 205
 28319 Glu Ile Val Glu Ala Ala Gly Gly Ser Glu Lys Leu Lys Ala Ala Ala
 28320 210 215 220
 28322 Ala Glu Gly Glu Asn Asn Lys Lys Ala Gly Lys Leu Phe Gly Lys Val
 28323 225 230 235 240

RAW SEQUENCE LISTING

DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:36

Input Set : N:\COPIES\EBONY\PB481USs1.txt

Output Set: N:\CRF3\05082001\I830230.raw

28325 Asp Gly Ala Ala Gly Asp Ser Glu Ala Ala Ser Lys Ala Ala Gly Ala
 28326 245 250 255
 28328 Val Ser Ala Val Ser Gly Glu Gln Ile Leu Ser Ala Ile Val Lys Ala
 28329 260 265 270
 28331 Ala Gly Glu Ala Glu Gln Asp Gly Glu Lys Pro Glu Asp Ala Lys Asn
 28332 275 280 285
 28334 Pro Ile Ala Ala Ala Ile Gly Lys Gly Asn Gly Asp Gly Ala Glu Phe
 28335 290 295 300
 28337 Asp Gln Asp Glu Met Lys Lys Asp Asp Gln Ile Ala Ala Ala Ile Ala
 28338 305 310 315 320
 28340 Leu Arg Gly Met Ala Lys Asp Gly Lys Phe Ala Val Lys Gly Asn Asn
 28341 325 330 335
 28343 Glu Lys Glu Lys Ala Glu Gly Ala Ile Lys Glu Val Ser Glu Leu Leu
 28344 340 345 350
 28346 Asp Lys Leu Val Thr Ala Val Lys Thr Ala Glu Gly Ala Ser Ser Gly
 28347 355 360 365
 28349 Thr Asp Ala Ile Gly Glu Val Val Asp Asn Xaa Ala Lys Xaa Ala Asp
 28350 370 375 380
 28352 Lys Ala Ser Val Thr Gly Ile Ala Lys Gly Ile Lys Glu Ile Val Glu
 28353 385 390 395 400
 28355 Ala Ala Xaa Gly Ser Glu Lys Leu Lys Val Ala Ala Ala Xaa Xaa Xaa
 28356 405 410 415
 28358 Asn Asn Lys Glu Ala Gly Lys Leu Phe Gly Lys Ala Gly Ala Asp Ala
 28359 420 425 430
 28361 Asn Gly Asp Ser Glu Ala Ala Ser Lys Ala Ala Gly Ala Val Ser Ala
 28362 435 440 445
 28364 Val Ser Gly Glu Gln Ile Leu Ser Ala Ile Val Lys Ala Ala Ala Ala
 28365 450 455 460
 28367 Gly Ala Ala Asp Gln Asp Gly Glu Lys Pro Gly Asp Ala Lys Asn Pro
 28368 465 470 475 480
 28370 Ile Ala Ala Ala Ile Gly Lys Gly Asn Ala Asp Asp Gly Ala Asp Phe
 28371 485 490 495
 28373 Gly Asp Gly Met Lys Lys Asp Asp Gln Ile Ala Ala Ala Ile Ala Leu
 28374 500 505 510
 28376 Arg Gly Met Ala Lys Asp Gly Lys Phe Ala Val Lys Lys Asp Glu Lys
 28377 515 520 525
 28379 Gly Lys Ala Glu Gly Ala Ile Lys Gly Ala Ser Glu Leu Leu Asp Lys
 28380 530 535 540
 28382 Leu Val Lys Ala Val Lys Thr Ala Glu Gly Ala Ser Ser Gly Thr Ala
 28383 545 550 555 560
 28385 Ala Ile Gly Glu Val Val Asp Asn Ala Ala Lys Ala Ala Asp Lys Asp
 28386 565 570 575
 28388 Ser Val Thr Gly Ile Ala Lys Gly Ile Lys Glu Ile Val Glu Ala Ala
 28389 580 585 590
 28391 Gly Gly Ser Glu Lys Leu Lys Val Ala Ala Ala Lys Gly Glu Asn Asn
 28392 595 600 605
 28394 Lys Gly Ala Gly Lys Leu Phe Gly Lys Ala Gly Ala Asn Ala His Gly
 28395 610 615 620
 28397 Asp Ser Glu Ala Ala Ser Lys Ala Ala Gly Ala Val Ser Ala Val Ser

RAW SEQUENCE LISTING

DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:36

Input Set : N:\COPIES\EBONY\PB481USs1.txt

Output Set: N:\CRF3\05082001\I830230.raw

```

28398 625          630          635          640
28400 Gly Glu Gln Ile Leu Ser Ala Ile Val Lys Ala Ala Gly Glu Ala Ala
28401          645          650          655
28403 Gly Asp Gln Glu Gly Lys Lys Pro Glu Glu Ala Lys Asn Pro Ile Ala
28404          660          665          670
28406 Ala Ala Ile Gly Asp Lys Asp Gly Asp Ala Glu Phe Asn Gln Asp Gly
28407          675          680          685
28409 Met Lys Lys Asp Asp Gln Ile Ala Ala Ala Ile Ala Leu Arg Gly Met
28410          690          695          700
28412 Ala Lys Asp Gly Lys Phe Ala Val Lys Asp Gly Gly Glu Lys Glu Lys
28413 705          710          715          720
28415 Ala Glu Gly Ala Ile Lys Gly Val Ser Glu Leu Leu Asp Lys Leu Val
28416          725          730          735
28418 Lys Ala Val Lys Thr Ala Glu Gly Ala Ser Ser Gly Thr Ala Ala Ile
28419          740          745          750
28421 Gly Glu Val Val Ala Asp Ala Ala Lys Val Ala Asp Lys Ala Ser Val
28422          755          760          765
28424 Thr Gly Ile Ala Lys Gly Ile Lys Glu Ile Val Glu Ala Ala Gly Asp
28425          770          775          780
28427 Ser Glu Ala Ala Ser Lys Ala Ala Gly Ala Val Ser Ala Val Ser Gly
28428 785          790          795          800
28430 Glu Gln Ile Leu Ser Ala Ile Val Lys Ala Ala Ala Ala Gly Ala Ala
28431          805          810          815
28433 Glu Gln Asp Gly Glu Lys Pro Ala Glu Ala Lys Asn Pro Ile Ala Ala
28434          820          825          830
28436 Ala Ile Gly Lys Gly Asp Gly Asp Ala Asp Phe Gly Glu Asp Gly Met
28437          835          840          845
28439 Lys Lys Asp Asp Gln Ile Ala Ala Ala Ile Ala Leu Arg Gly Met Ala
28440          850          855          860
28442 Lys Asp Gly Lys Phe Ala Val Lys Asn Asp Glu Lys Gly Lys Ala Glu
28443 865          870          875          880
28445 Gly Ala Ile Lys Gly Ala Ala Ala Ile Gly Glu Val Val Asp Asn Ala
28446          885          890          895
28448 Gly Ala Ala Lys Ala Ala Asp Lys Asp Ser Val Lys Gly Ile Ala Lys
28449          900          905          910
28451 Gly Ile Lys Glu Ile Val Glu Ala Ala Gly Gly Ser Glu Lys Leu Lys
28452          915          920          925
28454 Ala Ala Ala Ala Glu Gly Glu Asn Asn Lys Lys Ala Gly Lys Leu Phe
28455          930          935          940
28457 Gly Lys Val Asp Gly Ala Ala Gly Asp Ser Glu Ala Ala Ser Lys Ala
28458 945          950          955          960
28460 Ala Gly Ala Val Ser Ala Val Ser Gly Glu Gln Ile Leu Ser Ala Ile
28461          965          970          975
28463 Val Lys Ala Ala Asp Ala Ala Glu Gln Asp Gly Lys Lys Pro Ala Asp
28464          980          985          990
28466 Ala Thr Asn Pro Ile Ala Ala Ala Ile Gly Asn Lys Asp Glu Asp Ala
28467          995          1000          1005
28469 Asp Phe Gly Asp Gly Met Lys Lys Asp Asp Gln Ile Ala Ala Ala Ile
28470          1010          1015          1020

```

RAW SEQUENCE LISTING

DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:36

Input Set : N:\COPIES\EBONY\PB481USsl.txt

Output Set: N:\CRF3\05082001\I830230.raw

```

28472 Ala Leu Arg Gly Met Ala Lys Asp Gly Lys Phe Ala Val Lys Gly Asn
E--> 28473 025 1030 1035 1040
28475 Asn Glu Lys Gly Lys Ala Glu Gly Ala Ser Ser Gly Thr Asp Ala Ile
28476 1045 1050 1055
28478 Gly Glu Val Val Asp Asn Asp Ala Lys Ala Ala Asp Lys Ala Ser Val
28479 1060 1065 1070
28481 Thr Gly Ile Ala Lys Gly Ile Lys Glu Ile Val Glu Ala Ala Gly Gly
28482 1075 1080 1085
28484 Ser Glu Lys Leu Lys Ala Val Ala Ala Ala Thr Arg Glu Asn Asn Lys
28485 1090 1095 1100
28487 Glu Ala Gly Lys Leu Phe Gly Lys Val Asp Asp Ala His Ala Gly Asp
E--> 28488 105 1110 1115 1120
28490 Ser Glu Ala Ala Ser Lys Ala Ala Gly Ala Val Ser Ala Val Ser Gly
28491 1125 1130 1135
28493 Glu Gln Ile Leu Ser Ala Ile Val Thr Ala Ala Ala Ala Gly Glu Gln
28494 1140 1145 1150
28496 Asp Gly Glu Lys Pro Ala Glu Ala Thr Asn Pro Ile Ala Ala Ala Ile
28497 1155 1160 1165
28499 Gly Lys Gly Asn Glu Asp Gly Ala Asp Phe Gly Lys Asp Glu Met Lys
28500 1170 1175 1180
28502 Lys Asp Asp Gln Ile Ala Ala Ala Ile Ala Leu Arg Gly Met Ala Lys
E--> 28503 185 1190 1195 1200
28505 Asp Gly Lys Phe Ala Val Lys Ser Asn Asp Gly Glu Lys Gly Lys Ala
28506 1205 1210 1215
28508 Glu Gly Ala Ile Lys Glu Val Ser Glu Leu Leu Asp Lys Leu Val Lys
28509 1220 1225 1230
28511 Ala Val Lys Thr Ala Glu Gly Ala Ser Ser Gly Thr Asp Ala Ile Gly
28512 1235 1240 1245
28514 Glu Val Val Ala Asn Ala Gly Ala Ala Lys Ala Ala Asp Lys Ala Ser
28515 1250 1255 1260
28517 Val Thr Gly Ile Ala Lys Gly Ile Lys Glu Ile Val Glu Ala Ala Gly
E--> 28518 265 1270 1275 1280
28520 Gly Ser Lys Lys Leu Lys Ala Ala Ala Ala Glu Gly Glu Asn Asn Lys
28521 1285 1290 1295
28523 Lys Ala Gly Lys Leu Phe Gly Lys Ala Gly Ala Gly Ala Gly Ala Asn
28524 1300 1305 1310
28526 Gly Asp Ser Glu Ala Ala Ser Lys Ala Ala Gly Ala Val Ser Ala Gly
28527 1315 1320 1325
33173 <210> SEQ ID NO: 755
33174 <211> LENGTH: 123
33175 <212> TYPE: PRT
33176 <213> ORGANISM: Homo sapiens
33178 <400> SEQUENCE: 755
33179 Cys Asn Ser Asn Asp Thr Asn Asn Ser Gln Thr Lys Ser Arg Gln Lys
33180 1 5 10 15
33182 Arg Asp Leu Thr Gln Lys Glu Ala Thr Gln Glu Lys Pro Lys Ser Lys
33183 20 25 30
33185 Glu Glu Leu Leu Arg Glu Lys Leu Asn Asp Asn Gln Lys Thr His Leu
33186 35 40 45

```

*fix
numbering*

see P.30, too last sequence in file

RAW SEQUENCE LISTING

DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:37

Input Set : N:\COPIES\EBONY\PB481USs1.txt

Output Set: N:\CRF3\05082001\I830230.raw

```

33188 Asp Trp Leu Lys Glu Ala Leu Gly Asn Asp Gly Glu Phe Asn Lys Phe
33189      50                      55                      60
33191 Leu Gly Tyr Asp Glu Ser Lys Ile Lys Ser Ala Leu Asp His Ile Lys
33192  65                      70                      75                      80
33194 Ser Glu Leu Asp Ser Cys Thr Gly Asp Lys Val Glu Asn Lys Asn Thr
33195                      85                      90                      95
33197 Phe Lys Gln Val Val Gln Glu Ala Leu Lys Gly Gly Ile Asp Gly Phe
33198                      100                      105                      110
33200 Glu Asn Thr Ala Ser Ser Thr Cys Lys Asn Ser
33201                      115                      120

```

E--> 33204 1
E--> 33207 1

delete

fyi

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/830,230

DATE: 05/08/2001

TIME: 12:00:38

Input Set : N:\COPIES\EBONY\PB481USsl.txt

Output Set: N:\CRF3\05082001\I830230.raw

L:8 M:270 C: Current Application Number differs, Replaced Current Application Number
L:464 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:9
M:332 Repeated in SeqNo=9
L:686 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:10
M:332 Repeated in SeqNo=10
L:4889 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:103
L:4894 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:103
L:4899 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:103
L:4904 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:103
L:4909 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:103
L:4914 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:103
L:4919 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:103
L:4924 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:103
L:4929 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:103
L:4934 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:103
L:4939 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:103
L:4944 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:103
L:4949 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:103
L:4954 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:103
L:4959 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:103
L:4964 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:103
L:4964 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:23
L:4965 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:103
L:4965 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:24
L:4966 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:103
L:4966 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:24
L:4967 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:103
L:4967 M:320 E: (1) Wrong Nucleic Acid Designator, NUMBER OF INVALID KEYS:1
L:14152 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:320
L:14164 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:320
L:14182 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:320
L:14240 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:320
M:332 Repeated in SeqNo=320
L:14377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:321
L:14389 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:321
L:14407 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:321
L:14471 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:321
L:16472 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:364
L:18831 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:412
M:332 Repeated in SeqNo=412
L:19119 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:413
M:332 Repeated in SeqNo=413
L:24210 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:544
L:24314 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:545
L:25188 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:560
L:25253 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:561
L:28080 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:628
L:28085 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:628

VERIFICATION SUMMARY

DATE: 05/08/2001

PATENT APPLICATION: US/09/830,230

TIME: 12:00:38

Input Set : N:\COPIES\EBONY\PB481USs1.txt

Output Set: N:\CRF3\05082001\I830230.raw

L:28090 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:628
L:28095 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:628
L:28100 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:628
L:28105 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:628
L:28110 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:628
L:28115 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:628
L:28138 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:628
L:28139 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:628
L:28140 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:628
L:28194 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:629
L:28199 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:629
L:28204 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:629
L:28209 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:629
L:28214 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:629
L:28219 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:629
L:28224 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:629
L:28229 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:629
L:28239 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:629
L:28240 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:629
L:28241 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:629
L:28349 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:630
L:28355 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:630
L:28473 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:630
M:332 Repeated in SeqNo=630
L:28586 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:631
L:28592 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:631
L:29676 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:664
L:29681 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:664
L:29715 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:666
L:29971 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:672
L:29976 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:672
L:29989 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:672
L:30051 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:674
L:30093 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:676
L:30098 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:676
L:30103 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:676
L:30108 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:676
L:30113 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:676
L:30118 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:676
L:30148 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:676
L:30149 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:676
L:30295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:678
L:30298 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:678
L:30301 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:678
L:32231 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:732
L:32250 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:732
L:32264 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:733
L:32280 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:733
L:32353 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:734

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/830,230

DATE: 05/08/2001

TIME: 12:00:38

Input Set : N:\COPIES\EBONY\PB481USs1.txt

Output Set: N:\CRF3\05082001\I830230.raw

L:32430 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:735
L:32554 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:740
L:32559 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:740
L:32564 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:740
L:32569 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:740
L:32578 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:740
L:32591 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:741
L:32596 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:741
L:32601 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:741
L:32606 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:741
L:32614 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:741
L:32656 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:742
L:32707 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:743
L:32710 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:743
L:32773 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:744
L:32778 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:744
L:32779 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:744
L:32826 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:745
L:32831 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:745
L:32832 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:745
L:32894 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:746
L:32915 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:746
L:33204 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:755
M:332 Repeated in SeqNo=755
L:26 M:203 E: No. of Seq. differs, <160> Number Of Sequences:Input (148) Counted (755)